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ESSAYS IN CRITICAL REALISM

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ESSAYS IN CRITICAL REALISM

A CO-OPERATIVE STUDY OF THE PROBLEM OF KNOWLEDGE

BY

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PREFACE

THE present volume was projected in December 1916, and the work upon it has been carried forward since then by conferences and correspondence. All of the essays here gathered were written specifically for it, and most of them have been redrafted several times during the progress of the discussion. The actual publication has been delayed, however, by the war work of one of the members of the group. Our belief in the value of co-operative effort has been fully justified to our own minds by the result; for while the doctrine as here presented is, by contrast with the other well-known views, essentially that which all the members of the group have held for some years past, its final expression has been greatly clarified and its analysis sharpened by the elaborate mutual criticism to which our papers have been subjected.

Especial credit should be given to Professor Strong and Professor Santayana, who, though overseas during this entire period, have kept up a constant correspondence with the rest of us, and thus shared with their cis-Atlantic colleagues the fruits of their many years of consideration of the vexing problem we had chosen to attack. Professor Strong's book, *The Origin of Consciousness*, which contains a powerful argument for the epistemological view here also defended, came out after our essays were in practically their present shape. But several, at least, of us owe a peculiar debt, in the way of sharpening and filling out our analysis of the knowledge-

situation, to the correspondence with him which preceded the publication of that book. Professor Strong, in turn, acknowledges indebtedness to Professor Santayana for the principal concept he employs in his analysis, that of "essence." It seems desirable to mention specifically these debts, since most of the work of collaboration has necessarily been carried on by the other five members of the group, who were able to meet in person and correct one another's idiosyncrasies in oral discussion.

The doctrine here defended, while definitely realistic, is distinctly different from the "new" realism of the American group, whose volume, published in 1912, was a signal example of the value of co-operative effort in crystallizing and advertising a point of view in philosophy. Our realism is not a physically monistic realism, or a merely logical realism, and escapes the many difficulties which have prevented the general acceptance of the "new" realism. It is also free, we believe, from the errors and ambiguities of the older realism of Locke and his successors. To find an adjective that should connote the essential features of our brand of realism seemed chimerical, and we have contented ourselves with the vague, but accurate, phrase *critical realism*. Needless to say, the word "critical" has no reference to the Kantian philosophy, which should not be allowed to monopolize that excellent adjective. Our choice of this phrase was confirmed by the fact that several members of the group had already used it for their views - which, however divergent their expression, have been, we recognize, essentially the same.

This divergence in expression we have been content, in considerable measure, to retain. It reveals some slight divergences in emphasis, and in at least one point (noted in the opening essay in the footnotes on pp. 4 and 20, and discussed from one side in that essay and, at greater length, in the

concluding essay) a difference in analysis, which is important, but does not imply a difference of opinion among us as to what the existential situation in cases of knowledge is. The decision to permit these variations in angle of approach and method of analysis to stand was due not merely to individual obstinacy of preference, but to a hope that they might serve to correct the misinterpretations of our position to which the confinement to one set of terms would inevitably lead. Probably no one of us would wish to express himself exactly as any of the others has done. But our familiarity with one another's meanings has enabled us to understand methods of expression from which at first we were inclined to dissent; and no essay has been included in the volume until it has been so revised as to meet with acceptance, on all the major points, from the other essayists.

It should be added, however, that no agreement has been sought except on the epistemological problem with which this volume is concerned; and, actually, the members of our group hold somewhat different ontological views. Critics of the volume are asked to bear this in mind, and not to confuse the discussion of the epistemological solution here offered by the introduction of dissenting opinions upon irrelevant topics. We have found it entirely possible to isolate the problem of knowledge; and we believe that its solution lies along the lines that we have here indicated.

CONTENTS

PAGE

THE APPROACH TO CRITICAL REALISM. By DURANT DRAKE, Professor of Philosophy in Vassar College . . . 3

PRAGMATISM *VERSUS* THE PRAGMATIST. By ARTHUR O. LOVEJOY, Professor of Philosophy in Johns Hopkins University . 35

CRITICAL REALISM AND THE POSSIBILITY OF KNOWLEDGE. By JAMES BISSETT PRATT, Professor of Philosophy in Williams College 85

THE PROBLEM OF ERROR. By ARTHUR K. ROGERS, Professor of Philosophy in Yale University 117

THREE PROOFS OF REALISM. By GEORGE SANTAYANA, late Professor of Philosophy in Harvard University . . . 163

KNOWLEDGE AND ITS CATEGORIES. By ROY WOOD SELLARS, Associate Professor of Philosophy in the University of Michigan 187

ON THE NATURE OF THE DATUM. By C. A. STRONG, late Professor of Psychology in Columbia University . . . 223

THE APPROACH TO CRITICAL REALISM

THE APPROACH TO CRITICAL REALISM

By Durant Drake

I

THE JUSTIFICATION OF REALISM

There are two familiar starting-points for knowledge, the objective and the subjective. The objectively-minded philosophers suppose that the data of perception are the very physical existents which we all practically believe to be surrounding and threatening our bodies. These physical objects themselves somehow get within experience, are directly apprehended; their surfaces constitute our visual and tactile data. The subjectively-minded philosophers suppose, on the contrary, that the data of perception are psychological existents, so many pulses or throbs of a stream of psychic life. At best they are merely copies or representatives of the outer objects. In so far, both approaches are realistic; but the subjectively-minded realist is, in a sense, shut in, according to his theory, to "ideas," *i.e.* to mental substitutes for outer objects, whereas the objectively-minded, or naïve, realist (for this seems to be the view of the plain man) believes that his experience extends beyond his body, and includes, in some of their aspects, those outer subjects. Whatever arguments are then adduced for "realistic epistemological monism" and "realistic epistemological dualism" respectively do little to shake the faith thus based upon an initial definition. An *impasse* exists here, and will exist until it is seen that *neither* starting-point, objective

nor subjective, correctly describes what we have to start with, what is "given" (= what appears, what is apprehended) in immediate experience. It is the object of this paper, then, to expose the error in each of these views, and to point out a third view—we call it Critical Realism—which combines the insights of both these historic positions while free from the objections which can properly be raised to each.[1]

Before proceeding, however, to consider these two historic types of realism, it will be well to deal with the spectre of pure subjectivism, which is a likely, though not a logically necessary, deduction from the psychological starting-point. If we are shut in to our mental states, we can never know positively

[1] In the above paragraph I have, for convenience, given the names *epistemological monism* and *epistemological dualism* to the two historic positions which we believe to be transcended by our analysis. There is, I should add, some doubt among us as to whether our position should be called a *dualism*.

On the one hand, in certain contexts it is desirable to emphasize the duality which we believe to exist between the cognitive state which is the vehicle of knowledge and the object known. By contrast with neo-realists, idealists, and believers in "pure experience," we are dualists.

On the other hand, the term "dualism" implies to most readers, probably, the notion that what we *know* is a mental state (or "idea"), an existent from which we have to infer the existence and character of the physical object. This notion, however, we repudiate. What we perceive, conceive, remember, think of, is the outer object itself (or, on occasion, the mental state introspected, remembered, or conceived), which is independent of the knowledge-process, and beyond which there is nothing else.

Further, if the analysis is accepted (made in this essay, and, at greater length, in the concluding essay) which discriminates the "datum" in cases of knowledge from the mental state which is the vehicle of its givenness, we cannot say that the datum (what is "given" to the knower, what we start with in our epistemological inquiry) is an existent, representing the object. On the contrary, it is (in so far as knowledge is accurate) simply the essence or character (the *what*) of the object known. Professors Sellars, Lovejoy, and Pratt, however, maintain that although what is *given* is a mere character-complex, it is in reality *in toto* the character of the mental state of the moment, and so *is* an existent, in spite of the fact that its existence is not given (see on this point the footnote on p. 20); they may perhaps therefore be called dualistic by somewhat better right than the rest of us, although we all agree as to what the existential situation in knowledge is, and as to the fact that what we *know* is the independent object itself. Critics of our view are asked, therefore, not to label us simply as "dualists," but to recognize precisely what sort of duality we do and do not admit.

that anything exists beyond them. Perhaps, then, our experience (psychologically taken) = existence. It is doubtful, indeed, if any one practically believes this; for the content of our experience is very narrow, and we all really believe that many things exist, have existed, and will exist, that we, individually, and, for that matter, collectively, have never so much as thought of, and never will think of or know anything about. Moreover, those objects which we do think of, or perceive, are irresistibly believed to have an existence of their own, far more extensive, both as to nature and in time, than that of our evanescent and shallow experience. All who thus believe that existence is far wider than experience—that objects exist in or for themselves, apart from our experiencing them—are properly to be called realists. And we are now first to consider whether realism—any sort of realism—is philosophically indicated (as physicians say) as well as practically inevitable.

Now, as has been said above, it is the conviction of the authors of this volume that the psychological starting-point is as erroneous as the objective or physical. Our data—the character-complexes "given" in conscious experience—are simply character-complexes, essences, logical entities, which are irresistibly taken to be the characters of the existents perceived, or otherwise known. If this is true, it becomes necessary to ask what reason we have for believing in the existence of our mental states, as well as to ask what reason we have for believing in the existence of physical objects. For the present, however, we will postpone the former question, and confine ourselves to asking what right we have to believe in the existence of physical objects. The answer, in a word, is that our instinctive (and practically inevitable) belief in the existence of the physical world about us is pragmatically justifiable. We cannot, indeed, *deduce* from the character-complexes that follow one another in that stream that is the little private "movie" of each of us any proof of existence. This little realm of Appearance (*i.e.* what appears,

what is "given") might conceivably be merely the visions of a mind in an empty world. But we instinctively feel these appearances to be the characters of real objects. We react to them as if they had an existence of their own even when we are asleep or forgetting them. We find that this belief, those reactions, *work*—in the strictest scientific sense. Realism works just as the Copernican theory works, but with overwhelmingly greater evidence. The alternative possibilities are far less plausible. We can, indeed, refuse to make any hypothesis, and content ourselves with a world consisting merely of appearance. A philosopher who refuses to consider anything beyond appearance can fully *describe* what appears to him. But he cannot *explain* its peculiarities. Why should our sense-data appear and disappear and change just as they do in this abrupt fashion? The particular nature and sequence of our data remain unintelligible to the subjectivist, surds in his doctrine. Whereas, if there is a whole world of existents, the characteristics and relations of our data become marvellously intelligible. The argument could be strengthened in many ways, some of which Professor Santayana's essay suggests; but this is surely enough for most of us. Everything is *as if* realism were true; and the *as if* is so strong that we may consider our instinctive and actually unescapable belief justified.

As a matter of fact, the so-called subjectivist is really a mental pluralist. He believes in existents that transcend *his* experience—namely, in many minds. And the justification of that belief is no whit easier than that of the belief in physical existents. Indeed, the common argument, from analogy, rests upon a belief in physical existents outside of experience. The subjectivist, in short, is a realist as regards minds; and it should be enough to show him that there is no reason for stopping at this quantity of realism. Consistency demands either universal scepticism or a fearless and full-fledged realism.

It is a realization of the inadequacy of mental pluralism that constituted the chief urge toward the various forms of

epistemological idealism. But instead of moving on into these unnatural doctrines, why should not even the psychologically-minded philosopher accept the realistic universe, and thereby avoid the necessity of moving on? Primarily (though other motives enter in) because of his initial description of his data as mental states; and the presumption that all existence is of like sort. Even on his own ground, two sufficient objections can be raised to this assumption. In the first place, the fact that we are shut up to mental existence does not constitute a presumption that there is no other kind of existence—as the discussion of the "egocentric predicament" has made clear. In the second place, the rest of existence might be conceived as more or less like our experience in its intrinsic characters, and yet not *be* experience or experienced. For the differentia of experience from the rest of existence might be not its describable character, but an existential status, or an external relation, which does not apply to all of existence. It is not necessary, then, to expose the inaccuracy of the supposition that what is "given"—what we are conscious of—is a mental existent, in order to put in a demurrer to the movement from subjectivism toward epistemological idealism. There never was any necessity of an Absolute, or any such other far-fetched expedient to patch together the tattered world of the subjectivist. The belief in the existence of independent physical objects is not only the view of common sense and practical life—which, in lack of strong argument to the contrary, gives it an immense presumption—but is, from a standpoint unbiased by practical considerations, far the simplest and most sensible hypothesis to account for the peculiarities of what appears.

II

THE MECHANISM OF PERCEPTION

Granting, then, our right to be realists, however objectively or subjectively we may describe our data, let us proceed to

examine naïve realism. We must admit at once that it is *a priori* conceivable that our perceptual data are actually portions of external existence, slices or surfaces of the physical objects about us. But a very little reflection shows us difficulties in the way of this simple solution of the problem of perception. For our data, the characters which appear, are not only inadequate aspects of outer objects, but are often *different* from any aspect of them which we can believe to be a part of their independent, physical existence. There is what Professor Montague has called "the epistemological triangle," the outer object, the conscious organism, and the datum of perception, the character-complex apprehended, which, in the case of perception, always includes character-traits not belonging to the actual character of the object itself.

It is necessary to go into detail upon this matter, since the point of view of naïve realism has been adopted, more or less clearly, by various contemporary philosophers who, plagued by the difficulties of the traditional dualistic realism, and weary of the intellectual excesses of idealism, have sought to take refuge in a simpler and more natural outlook. All the qualities which we seem to see in objects are really there, we are told, aspects of the spatially extended object; and our fields of consciousness overlap spatially when two or more of us look at the same object. Thus Professor Holt declares that his view "implies that the soul, so called, is extended in space." [1]

Elsewhere Mr. Holt and his confrères tell us that the sense-datum is a spatial *projection* of the outer object, so that the data of different perceivers of the same object are not in quite the same "perspectives." But all the sense-data are between the source of radiation and the several perceivers, and are, together with that core, a real part of the object sensed. The term "object" here refers to a definite portion of space, but includes this aura of sense-qualities that surrounds the core—

[1] *The Concept of Consciousness*, pp. 150 ff. See also his essay in *The New Realism*.

the spot where we commonly take the object to be. Thus objects interpenetrate, as well as fields of consciousness. This view may, however, be classed, for our purposes, with what Professor Holt calls the " crude, brickbat " view of matter of some other naïve realists. According to both views, our fields of consciousness extend out into physical space and overlap. We may then group them as varieties of naïve realism, which in any form requires us to accept either one or the other horn of a trying dilemma. Either we must assert that our infinitely various sense-qualities all exist with relative permanence in the object, independently of whether or no it is perceived, or else we must explain how the qualities sensed by the various perceivers *get* there at the moment of perception.

Let us first suppose the naïve realist to take the latter alternative and to say that sense-data are *produced* by the organism, and spatially *projected* into the object at the moment of perception. Perception is thus a boomerang, projecting the qualities produced (by the co-operation of organic factors with the message coming in from the outer existent) out into the outer source of perception. The perceiver literally clothes that outer physical existent with his sense-data, which thereupon, for the time, really exist in the object. This is quite conceivable ; but it is quite contrary to the evidence. There is no evidence of the existence of any such spatially projective mechanism. Perception is a one-way process, proceeding from the outer source of radiation to the organism. There is a sense, indeed, in which it is true to say that we project our sense-data into the objects we perceive : we *imagine them there.* But this " projection " is not an existential proceeding ; the characters we conjure up in the world about us are not really *there*, except in so far as they really *were* there before perception took place. And so far as secondary and tertiary qualities go, and most of the primary qualities of pure sensations, they are never there at all.

Suppose, then, the naïve realist to take the other horn of the dilemma, and to declare that all sense-data are really

aspects of the object prior to perception, although only selected qualities enter into any one conscious field. Every change in sense-organ or brain-event enables a perceiver to become aware of some new one of the myriad qualities of the spatial object, and requires it to exclude all the other qualities that are there, some of which other fields of consciousness may be simultaneously including. To say that the tree is green or beautiful " for me " means simply that the green quality really exists all the time out there in the tree, within my field of consciousness, but not within my colour-blind neighbour's field, which instead includes the grey quality, equally existing out there, which keeps out of my field. Our respective mechanisms of perception are differently selective. . . . But are they ? Actually the same sort of ether-wave travels, from the identical physical event, to both you and me. We do not select different bits of existence to affect our several organisms ; we are simply affected differently by the same bits of existence. This is not true of observers who look at different sides of objects, but it is true of observers on the same side of an object, though one may be near and the other far, one normal-sighted, clear-headed, and filled with the beauty of the object, the other colour-blind, drugged with alcohol, and seeing the object blurred or double. Can I truly be said to " select " the grey out of a grey-red total, while you select the red ? That would be true only if the ether-wave contained both the " red " and the " grey " vibrations simultaneously, your eyes for some reason making no response to the latter, while mine make no response to the former. The fact is, of course, that only the " red " vibrations come to our eyes—*i.e.* vibrations of the rate which produce the perception of red via ordinary human eyes ; my eyes, being of an uncommon type, set up a different sort of reaction, which causes my different sense-datum to appear.

In this case, chosen for the sharp colour-contrast it offers, my eyes are " abnormal." But it is not the case that perception even then is " selective " ; it is simply, if you please,

pervertive. And in the case of the infinitely different shades of colour seen by " normal " eyes in an object, there is no ground for saying that all the sense-data but one pervert the " real " colour of the object. Each datum has equal claims to validity. Neither at the origin-end of the ether-wave nor in our organisms is there so much selection as a passive causal process. The differences are differences produced primarily *in our organisms* by the same outward causes. But if this is true, our differing sense-data do not exist out there in the physical objects.

It is further clear to the student of psychology that the issue as to what perceptual data shall appear is largely determined by the past history of the particular organism involved. A baby has very different data from an adult when perceiving the same objects, and a Hottentot from a European. We are accustomed to note this fact by speaking of the " subjective " elements in perception. In the cases of memory and thought, the " subjective " factors (the organism's past history and brain-organization) are proportionately still more important. Do these " subjective " elements, then, exist also in the object independently of perception ? That seems a flagrant case of the pathetic fallacy. Some naïve realists do indeed, for consistency's sake, declare that " affectional " qualities really belong to the life of the object. Storm clouds are really in themselves sullen, and sunshine gay. The same physical existents are really familiar and strange at the same time, sublime and ridiculous, alluring and repellent ; all these qualities really exist out there in space.

To state this position seems enough to discredit it. It is indeed the *reductio ad absurdum* of naïve realism. And yet the case is really no different for secondary and many sensational primary qualities than for tertiary qualities. All sense-data report the nature of the perceiver quite as much as the nature of the object perceived ; and these " subjective " elements the organism has no way of ejecting into the outer existent. To say that primary and secondary qualities pre-

exist in the object, while tertiary qualities are put there momentarily by the perceiver, would be to have *both* difficulties on our hands at once; perception would have to be shown to be *both* a selective and a projective mechanism (in the sense explained), whereas it is neither! Finally, to consider some aspects of our sense-data as bits of outer objects, and other aspects as "mental," or "in our minds," would be to have the difficulties both of naïve realism and of dualistic realism to cope with. In short, naïve realism, whether partial or thorough-going, falsifies the nature of the mechanism of perception.

III

THE EXISTENTIAL INCOMPATIBILITY OF DIVERSE SENSE-DATA

An even more obvious difficulty of naïve realism lies in its implicit implication that contradictory qualities coexist at the same point in space. Illustrations familiar to controversialists have clearly shown how lavish the endowment of objects must be if every quality we seem to perceive in them is existentially present in them. So lavish that they would cease to have any definite nature, and become mere blurs of contradictory qualities. If we reject the "brickbat notion of physical objects," and call many of their perceived qualities "projective properties," [1] the situation becomes still more chaotic. The red that is now at a given distance from the disc occupies the identical position of the blue that some other observer sees in another object. Pushing the qualities of physical existents into near-by spaces outside of them makes a vast interlacing of auras, and confusion worse confounded.

In short, consistently objectivistic realists have to give up what Professor Montague calls the "axiom of uniplicity," and declare that contradictory qualities can exist together at one and the same point of space, although, owing to the limitation

[1] Holt, in *The New Realism*, pp. 371-372.

of our organisms, we can perceive only one at a time. Thus Mr. G. E. Moore calls it " an assumption "

" . . . that if a certain kind of thing exists at a certain time and in a certain place, certain other kinds of things cannot exist at the same time in the same place." [1]

Mr. Percy Nunn calls the idea of the " true " colour of a thing a " pragmatically simplified concept."

" A hot body owns at the same time all the hotnesses that can be experienced around it." " The buttercup actually owns—' as co-ordinate substantive features '—all the colours that may be presented under different conditions." [2]

Few of the upholders of this contention attempt any proof that it is true. They try to make themselves content (albeit one can discern uneasiness) with the fact that it cannot be disproved, and accept it as the unpalatable but logically necessary corollary of the doctrine which they have espoused. Professor Holt, however, boldly glories in it, defending it by a sort of *tu quoque* argument. The whole world is chock-full of contradictions :

" Every case of collision, interference, acceleration and retardation, youth and decay, equilibrium, etc., etc., is an instance." " The entire universe is brimming full of just such mutually contradictory propositions." [3]

But this opposition of forces or laws is not really a case of contradiction ; these laws or forces are really but *tendencies*, which are not *actualized* simultaneously. This is a very different matter from the compresence at one point, at the same moment, of contradictory variations of one generic quality (such as colour) which he seems to think becomes thereby more plausible. It may indeed be true that there are conflicting tendencies,

[1] *Proc. of Aristotelian Soc.* (N.S.), vol. vi, p. 122.

[2] *Ibid.*, vol. x, pp. 197, 203. See similarly S. Alexander, *ibid.*, vol. x, p. xi.

[3] *The New Realism*, pp. 364, 370. Cf. also his *The Concept of Consciousness*, ch. xiii.

each of which, unchecked, would produce its particular shade of colour in an object. But the actual result of these conflicting tendencies would be, not to produce compresent colours, but to produce a compromise; the resultant colour, while physically a blend or mean, would be none the less a single definite colour, just as the movement of a body is not a superposition of various contradictory simultaneous motions, but a single compromise motion.

Professor Holt hints at another solution, however, viz. that some of these superfluous and troublesome qualities exist not in "real space," but in other spaces "equally objective"; yet they are not "unreal, still less existent merely for consciousness."[1] Mr. Bertrand Russell more explicitly adopts this view in his lectures on the Scientific Method in Philosophy; the physical universe consists of an infinite number of private worlds, or "perspectives."

"Each mind sees at each moment an immensely complex three-dimensioned world; but there is absolutely nothing which is seen by two minds simultaneously. . . . The three-dimensioned world seen by one mind contains no place in common with that seen by another." Yet "each exists entire exactly as it is perceived, and might be exactly as it is even if it were not perceived." "There are as many private spaces as there are perspectives; there are, therefore, at least as many as there are percipients, and there may be any number of others which have a merely material existence and are not seen by any one."[2]

But is this not jumping from the frying-pan into the fire? Such a multiplication of existing spatial orders is even less credible than the multiplication of existent qualities in one spatial order, and open to the same objections.[3]

A variation of this view is that developed by Professor

[1] *Ibid.*, pp. 354, 367.

[2] Pp. 87, 89.

[3] It is to be noted that Mr. Russell's "perspectives" are real physical existents, out there in real space, and not mere appearances. As appearances we must all recognize them. And if we are content to give their incompatible aspects no existential status no difficulty will arise.

McGilvary. According to him, one definite set of qualities makes up the " material world," and is studied in science, while all the other qualities are equally existent and " out there," but not a part of " the executive order of the world," and not found there by science. Qualities are to be divided into those which are " space-monopolizing," and those which are " space-occupying." The former sort he calls " material qualities " ; only one of each genus of these can exist at a given point. But an infinite number of the latter, which he calls " immaterial qualities," may exist there.[1] But it is not clear how the difficulty of conceiving the presence at the same point in space of synthetically incompatible qualities is lessened by calling some of them " immaterial," if they are thought of nevertheless as really existing there.

What, then, are our objections to such a telescoping together of qualities as objectivistic realism involves ? In the first place, it goes sharply against both common sense and science, which view physical existents as having a definite shape, size, colour, etc., and not as consisting of a chaos of mutually exclusive qualities simultaneously occupying the same points. These qualities (as all the shades of colour seen at a given point by different observers, and by the same observers at different times) are synthetically incompatible ; they will not fuse together into a single existent. Hence, the view we are criticizing is a thorough-going relativism, repudiating definiteness of character in existence, and giving us, instead of a single, coherent world, an infinite welter of qualities.

In the second place, it apparently makes error impossible. If all the qualities we see in objects really exist " out there " in space, how can any one's verdict as to the nature of the physical existent be any truer than any one else's ? The naïve realists have never answered this question in a manner satisfactory to their critics. But this theme is sufficiently developed by Professor Rogers.

[1] *Philosophical Review*, vol. xxi, p. 152.

In short, neo-realism multiplies the qualities of the outer existent *praeter necessitatem*; we cannot really believe it to be so rainbow-tinted. Objective idealism, it may be noted in passing, lies open, at least in its simplest formulations, to the same objection. An absolute Mind, being a synthesis of all finite minds, must therefore be an indescribable and inconceivable blend of myriads of mutually contradictory items. In opposition to both of these theories, we affirm that the existent at a given point of space at a given time never has more than one set of compatible qualities.[1]

A further cause of complications for the naïve realists results from the temporal-spatial dislocation of Appearance from Reality. The star Vega appears within my field of consciousness now, directly overhead; whereas the astronomical star Vega may, for aught we know, have been dissipated into vapour years ago, and, if not, is certainly not now in the direction from me in which this twinkling point of light appears. What is strikingly true in the case of stars is true, in some measure, of all perception. Physical events send off their messages to us; our perceptual data appear at a later moment, and seem to be in the direction from us in which the object existed at the time when the message started. If, then, our perceptual data are existents, they cannot be the same existents as those from which the message came, because they have a different temporal-spatial locus. For the very meaning of "existence" involves a definite locus. If a particular somewhat has no particular describable locus, we do not call it an existent. If it exists at one place and also at another place at the same time, we call the second case of existence another object. Naïve realism gives us, thus, a world reduplicated not only by the infinite differences in quality which different observers see in objects, but also by the temporal-spatial dislocation that occurs in a single act

[1] The present writer would go further, and say that only *one quale* exists at any one point at a given instant. But that is a further doctrine not here defended.

of perception. Even if qualitatively identical data appeared to all of us when we perceived an object, the data of the different perceivers, standing at different distances from the object, would have a different temporal locus from one another, and from the locus of the event in the object that bears the same name. In the case of sounds a stop-watch will reveal the temporal differences. In the case of sight, the ether-waves travel so fast that the temporal difference of the appearances in different fields of consciousness is inappreciable. But it is clear that if human observers could stand upon different planets, the difference in temporal locus would amount to minutes. And the principle is always the same, however slight the difference.

It might, of course, be held that the star sense-datum, while existentially another fact from the astronomer's star, nevertheless exists up there in the physical sky above my organism, a sort of lingering after-effect of the physical star, a temporal-spatial shadow. Similarly, physical existence may always have its series of shadows, which, instead of the original events, constitute our sense-data. But this again multiplies physical existence *praeter necessitatem*, is repugnant to common sense, and raises the question why these existent shadows are physically inefficacious, and never discovered by physical science.

One or two contemporary thinkers seek to avoid the problem by asserting that our data are not qualities at all, but merely *relations* which physical objects have to conscious organisms. If a given tree looks green to you and grey to me, then green is a relation which it has to your organism and grey a relation which it has to mine. Thus Professor Cohen writes : [1]

"All qualities are essentially relational, *i.e.* characteristics or processes which a thing can exercise only in relation to other things

[1] *Journal of Philosophy, Psychology, and Scientific Methods*, vol. xi, pp. 622-662.

or within a system. . . . Physical qualities are surely not the private possession of things in themselves, but determinate relations which terms have in a physical system. This view, of course, does not deny the existence of terms, literally termini of relations, but it denies that terms have any nature apart from relations. The world of existence is thus a network of relations whose intersections are called terms."

Now it is true that " physical qualities "—the qualities which physical science talks about—are apparently reducible to relations. *E.g.* hardness, in the scientific sense, is nothing but the fact of the relative impenetrability of the body in question by other bodies ; colour, heat, and light are but rates of electronic vibration and ether pulsation. But this merely shows that science uses these terms in another sense from that of common sense and psychology. The experienced-quality " hardness " is not the fact of impenetrability, nor is the " whiteness " seen on this paper merely a vibration. Qualities in the psychological sense are—just what they appear to be. There is no use in language at all, if it cannot make clear so simple a fact as that when we speak of such a quality we mean something different from what we mean when we speak of a relation. In other words, the distinction between " quality " (in the ordinary sense of the word) and " relation " is one of those primary distinctions which, though difficult to explain in other words, is irreducible. To say that qualities are really relations is like saying that what we call bad is really good ; it is to blur an indispensable distinction in meaning. An outer existent may be supposed to have any relation you please to an organism. That relation will not be what we mean by the term " green." We know what we mean by the term, we mean a certain quality that appears, a somewhat that (being a simple, and not a complex object) is definable and describable only by its relations—as by showing its place in a colour series, or by telling what mixture of pigments or what whirling segments of designated cardboards will produce it. That there appears, on occasion, such a quality, we know.

A relation, on the other hand, has a totally different kind of being. It is not a quality, but a truth *about* qualities. It could not *be* unless there were qualities to be related. So that to do away with qualities would be, *ipso facto*, to do away with relations. A relation may have a relation to another relation; perhaps this new relation may have a relation to a fourth relation; but reversing this series, we get back somewhere to qualities. For the *very meaning of the term* "relation" includes reference to something related; the very first relation could not come into existence until there were two entities to be related. The distinction comes out sharply in the world of existence; no existent can have (or *be*) contradictory qualities, it must be one particular somewhat and nothing else, just as it must occupy one position in space and time and no other. But it can have contradictory relations to its heart's content. The motive behind the attempt to reduce qualities to relations is precisely the hope of thereby escaping the principle of contradiction. But the escape can be made only by breaking down an indispensable and valid distinction. We must insist that the data of consciousness are *qualia*, which must not be ignored in describing the perceptual situation. These three factors are always present in veridical perception: the outer physical event, the mental event, and the Appearance or datum. When two observers are perceiving the same object, there are five items to be discriminated: the outer physical event, the two minds concerned, the two sets of data. These two sets of data are, in veridical perception, to some extent identical. But to a large extent they are dissimilar, and incompatible as aspects of a single object.

IV

THE STATUS OF SENSE-DATA

The preceding arguments suffice to discredit the view which we have called naïve realism. Our data of perception are not

actual portions, or selected aspects, of the objects perceived. They are character-complexes (= essences), irresistibly *taken*, in the moment of perception, to be the characters of existing outer objects. That is, the sense of the outer existence of these essences is indistinguishably fused with their appearance. But these two aspects of perception, the appearance of the character-complex and the (implicit) affirmation of its outer existence, must, in reflection, be distinguished. For the belief in its existence may be mistaken, while the character that appears does really appear. In so far as perception is veridical, the characters that appear are the characters of physical objects. But there is never a guaranty, in the moment of perception, that they really are the characters of any outer existent; there is always the theoretic possibility that they are merely imaginary or hallucinatory data. The reason for holding that our instinctive attribution of outer existence is usually warranted, in veridical perception, was given in the opening section of this essay. But after all, even "veridical" perception is only partially veridical; our perceptual data are at best only in part genuine aspects of outer reality. So that what appears, *as a whole*, is never quite what exists.

But neither, now, are the essences that appear in perception my mental states.[1] To anticipate the view defended

[1] The question whether we should or should not make this distinction between what is "given" (the "datum") and the character of the mental existent which is the vehicle of the givenness, is the one question in our inquiry upon which we have not been able fully to agree. This appears, however, to be a question as to terms, not a disagreement as to the existential situation in knowledge. Our uncertainty as to the pertinence to our doctrine of the term "dualism," discussed in the footnote on p. 4, hinges mainly upon this question.

We agree that what is "given" is what is grasped in knowledge, what is contemplated, the starting-point for discourse; and that what we thus contemplate (are aware of) is, in the case of perception, something outward, *apparently* the very physical object itself. This outer existent, however, is not literally grasped, as the neo-realists suppose; only its *what*, its essence or character, is grasped, as explained in this essay and throughout the volume.

The point of difference is this: Professors Lovejoy, Pratt, and Sellars

in the concluding section of this essay, mental states always do exist when data appear. But the datum, what is "given," present to my mind, in perception is the essence "such and such a physical object," not the essence "such and such a mental state." And the two essences are necessarily quite different. When I dream, for example, of a bear chasing me, my datum at the moment is the character-complex or essence "a bear chasing me." The dream-states, as we shall see, exist; but the *bear*, what I am dreaming of, is not a mental state. It is a character-complex taken to have existence at the moment, but in reality having no actual existence at all. So if I think of a centaur, or imagine I see a ghost, or get drunk and seem to see a snake under the table, in each case my mental states exist, but their data, the appearances they yield me, are to be distinguished from the mental states themselves. Exactly so is it in veridical perception. There appears to me the

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hold that what is "given" is, in all cases, and *in toto* in each case, the character of the mental existent of the moment, although its existence is not given. The other four of us hold that what is "given" results not merely from this cognitive use of the character of the mental state of the moment, but also, in part, in most cases, from the attitude of the organism, which may not be represented in the character of that mental state. In other words, the *function* of the mental state, as well as its actual content, or character, helps to determine what is "given." If this is so, the datum as a whole (the total character given) is not the character of any existent; the separate traits that make up its complex nature may be traits of the mental existent, traits of the object known, or both, or neither.

This *situation* is recognized by us all; hence the propriety of calling our difference a terminological one. Our difference of opinion consists in a divergent use of the terms "given," "datum," etc. Some of us speak of as "given" only those traits that are traits of the mental existent of the moment—traits, that is, that have actual, literal, psychological existence. The rest of us include in the term the traits apprehended as belonging to the object through the attitude, or reaction, of the organism. According to the latter usage, adopted in this essay, the datum is, *qua* datum, a mere essence, an imputed but not necessarily actual existent. It may or it may not have existence. It exists just to the extent in which it is, in fact, the nature either of the object known or of the cognitive state (mental existent) of the moment —an extent which varies from case to case. Meanwhile, according to the former usage, the datum has *in toto* a psychological existence, and may be spoken of as "mental content."

character-complex "a black, oblong desk over there." *That* is not a mental state; we do not *mean* by those words the mental state (whose existence is implied, as we shall see, in the appearance of that datum), but the character-complex apprehended. No; our data are, *qua data*, simply character-complexes which we *take* to exist (except in cases of recognized illusion, imagination, etc.), but which have no existence, except as some of the traits of the complex are actual traits of the physical object perceived, and some are traits of the perceiving state. In other words, "givenness" simply means concretion for discourse, and for action, and does not imply a similar concretion in existence.

Of course this peculiar status—givenness, or appearance—which essences have when they float before consciousness might be called "mental existence," since, like Humpty-Dumpty, we are, after all, masters of our own terms. But there are two objections. In the first place, we need the name "mental states" for what *does* exist—the mental existents which make possible the appearance of the essences. In the second place, if we say that the datum exists, even "mentally," we shall be tempted to locate it, and naturally, to locate it where it appears to be. But as soon as we do this, the troubles that we have noted in the two preceding sections of this essay are again on our hands. Merely calling these supposed existents "mental" solves no problem. If they are really existent, then, even when they are hallucinatory data, they have a definite locus. The ghost that I see in my doorway is really there, the snake seen by the drunken man is really under the table. But if so, how do they *get* there? Why are they not discoverable there by any one else? Why are they so inefficacious, finding no place in the constructions of science? Do they pop in and out of existence out there when I open and close my eyes?

No, *qua* data they are only imagined or dreamed to exist—if the words "imagine" and "dream" may be taken in a sense broader than the usual. We may imagine *truly*, we may

dream *truly*; but whether we do or no, the status of the imagined (or "given") essence is the same, apart from the further question whether or not it be the essence of an actually existing object. Perception is, in a sense, imagining character-complexes out there in the world, together with an implicit attribution of existence—which may conceivably be, and is occasionally, entirely mistaken. These imagined character-complexes are our data. Usually some of the traits of the character-complex are real, some are *merely* imaginary. But whether really there, or not there, they are never *found* there, by a sort of telepathic vision, but are *imagined* there by a mind. They become data only when the organism, affected by the outer object, imagines them as characters of the object, in those vivid ways we call "seeing," "feeling" (with our fingers), etc. The organism does not actually project the qualities there, so as to change or add to the character of the object, which is quite unaffected by the perceptual process; if the character-traits apprehended were not there before the organism was affected, they never get there. Perception, unlike what in the narrower sense we call imagination, occurs whether we wish or no; the nature of what we shall imagine is partly determined by the messages reaching our brains from the objects; and the imagined character-complexes have a vividness and tang of reality which our centrally excited states of imagination seldom have. But with these qualifications, we may call perception a sort of imagination—vivid, controlled, involuntary imagination, which is to some extent veridical. The appearance, or givenness, of character-complexes, which makes them *data*, is nothing but the fact that they are, in this broad sense, imagined.

To what *extent* perception is veridical is not our present problem. We may accept the general verdict here, which holds that only the primary perceptual qualities are literal characteristics of objects. That is, in the case of the black-oblong-desk-over-there, there really is a "desk" in existence, it really is "over there" (*i.e.* at a certain distance from the

perceiver), it really is " oblong," and of such and such a size. But it is not, in itself, " black," except in the sense that it has certain definite characteristics which cause the character-trait " black " to appear to us. But however this may be, the thesis of this volume is that *in so far as* perception gives us accurate knowledge, it does so by causing the actual characteristics of objects to appear to us. The objects themselves, *i.e.* those bits of *existence*, do not get within our consciousness. Their existence is their own affair, private, incommunicable. One existent (my organism, or mind) cannot go out beyond itself literally, and include another existent; between us all, existentially speaking, is " the unplumb'd, salt, estranging sea." But the mechanism of consciousness is such that I can conjure up, imagine, " perceive " the location and characteristics of the objects about me, to a certain extent correctly. We thus directly " perceive " what is *there*—the character of the objects. This is not naïve realism, but it is nearer to it than the traditional dualistic realism realized that it could get, and enough, one would suppose, to satisfy the plain man. At any rate, it is all we have got, and we might as well be content!

Though we have been speaking hitherto only of perception, the same analysis applies to conception, memory, and introspection. But the case of perception is the stronghold of naïve realism; and if we can expose the inadequacy of that doctrine, then there should be no difficulty in applying our revised terms to the other cases. Indeed, naïve realism has always had a hard time in making its position with regard to these cases even clear, much less plausible. When we perceive an object, it is (initially) plausible to suppose that our consciousness somehow is out there in space resting upon the object—or, to put the same view in other terms, that " consciousness " is but a group of, or relation between, certain aspects of outer objects, caught out there in their spatial existence. But when I remember a past event, how can the past event, now dead and gone, actually get within my

consciousness ? When I think of the other side of the earth, how can my consciousness actually include it ? The difficulty is so apparent that the plain man ceases to be a " naïve realist " when he thinks of these very common cases. And indeed, no solution can be reached until we recognize that the datum that appears, the character-complex remembered or thought of, is not, *qua* datum, an existent, but is simply a character-complex, *now* " given " (" imagined "), but which (if memory or conception is accurate) was or is the actual character of the object remembered or thought of. The only *existents* concerned, in all cases of cognition (using this as a blanket term for all cases of recognized or implicit knowledge of reality), are the objects known (if they are, or were, existent objects), the mental states that are the ground of cognition, and the intermediary processes, such as ether-waves, sense-organs, and brain-processes. What *appear*, our *data* (sense-data, memory-data, thought-data, etc.), are merely character-complexes, logical entities, not another set of existents to find a locus for in the world of existence.

V

MENTAL STATES *VERSUS* DATA

We have postponed consideration of the question which must have been recurrently arising in the mind of the reader : viz. how do we know that there *are* any " mental states," or any " minds," anything in addition to organisms and outer objects and the essences that appear ? To approach the problem from another angle, what must the mechanism of cognition be, that these complexes of qualities get " imagined " as existing out there in the world ? Could a mere brain do that ? How ? It is, certainly, only if they influence a brain that outer objects cause the appearance of their characteristics as our data. But is merely influencing a brain enough ? What happens in the brain is, doubtless, that brain-states come into

existence whose characteristics (so far as perception is accurate) have a one-one correspondence with the characteristics of the outer objects. But the characteristics of brain-states (as we ordinarily understand the nature of brain-states) are very different from the characteristics of our data. This is a commonplace of philosophy, and the obvious objection to materialism. These peculiar qualities that make up the data presented to consciousness—the sense-quality "red," for example—can a brain-state cause these to appear? To the writer it seems clear that either the brain is a good deal more than we commonly think it to be, or else there is a series of mental states, those existents which can be introspected, in addition to the brain. In the former case, the brain-states have really the qualities, in addition to their other characteristics, that we call "mental"; so that, in either case, there do exist, in or in intimate connection with the brain, a series of "mental states," which have the qualities that make our data appear. Unless this is so, no intelligible account can be given of how our data can appear at all; they would remain mere not-given, not-appearing essences—mere potentialities, not actual perceptual (or conceptual) data.

It is important to emphasize the fact of the *existence* of mental states, as well as of physical objects, since many passages in current writings of the neo-realistic school blur the very concept *existence*. Take, for example, the following passage from Professor Holt:

> "The landscape that I experience is, if we take certain simple precautions, in all essentials identical with the landscape that you experience. . . . A certain shade of red can be the quality on a tulip and can be immediately within the experience of a hundred lookers-on at the same time." [1]

To this we may say, so far so good! The essence, or logical ("neutral") entity, which is my datum in a given case of perception or conception may be identically the same essence

[1] *The Concept of Consciousness*, pp. 152-153.

that is your datum, and even the very essence, or character, of the existing object perceived or conceived by us both. This essence may be said to have being or subsistence independently of my, or your, consciousness of it, and of its embodiment in the object. That is a convenient manner of speech, and need not imply a Platonic belief in the priority or ontological significance of this sort of being.

But these " logical realists " seem sometimes to be content with a world composed merely of essences. They fail to explain how a " given " essence differs from an essence that is not given. That is, having postulated the identity of the essence given to you and to me, and that embodied in the object, they call the knowledge-problem, in that case, solved, ignoring the fact that the essence could not be given to either of us unless we each had mental states which are existents and therefore different existents. What my experience and yours have in common is merely (on occasion) the essences that we are conscious of ; our existing mental life is never identical, our minds never overlap. Each has its own locus. For that is the way with existence. An existent is something that occurs at some definite time and place (or, if the reader objects to the putting of mental states into space, he may substitute for " place " the clause " is somehow related to some definite place "). In order that your datum and mine may be the identical shade of red, you and I must have *similar* mental states ; your mental state may even be an exact duplicate of mine, but it is a second case of existence, having a different locus. Two copies of a book are not existentially identical, however logically identical their character ; nor are two mental states. Moreover, whereas logical essences have no causal efficacy, mental states have causal efficacy ; your state has one set of causes and effects, mine quite another set of causal relations.

As a matter of fact, it is doubtful whether, however identical the data of my consciousness and yours, my mental states and yours are ever exactly similar. Identical essences can be

" given " by means of very varying mental states. A vivid sensation, a faint sensation, a memory or conceptual state, can be the vehicles, at different times, by which one and the same essence can be given ; so that, for all the fluidity of our mental life, and the disparity between my mental life and yours, we live in the presence of common and relatively stable objects. This is possible because the essence given is a mere intent, a focus for discourse and action ; the fact that just this essence is given is the result not of the mental state alone, but of that plus the attitude of the organism, all the irradiations (including verbal associates) of that sensational or conceptual nucleus.

So when Professor Holt speaks of the " conceptual nature of the universe," and essays to deduce consciousness from simpler logical essences, he is attempting a fundamentally impossible enterprise. You cannot deduce existence from logical terms and propositions. The essence " existence " is not existence itself ; a mere logical term cannot tell us whether anything corresponding to it has an actual locus in the flux of events that is the existential world. You can have the essence " consciousness " in a conceptual universe. But to have actual consciousness you have to have really existing minds.

The situation is, then, more complicated, contains more factors, than the logical realists suppose. We must make room in our picture of the universe for the separate mental states of all the conscious beings in it, each group of mental states forming a separate mind. We must also keep these existents sharply distinct from the existing physical objects of which these minds have knowledge. We do indeed, in a sense, immediately grasp or apprehend (are conscious, or aware, of) outer objects. But it is a logical, essential, virtual grasp of objects, not the existential identity of object and experience which the neo-realists assume. Our instinctive and irresistible feeling that what we have given, what we are aware of, is not a screen of " ideas," but the object known itself, is, in a very

real and important sense, true. Knowledge *is* a beholding of outer and absent objects in a very real and important sense —a beholding, that is, of their *what*, their nature. But the physical existent itself does not get within experience, and we are left with a multiplicity of existents—my mental state, yours, and other peoples, and the several objects known.

Why then, once more, if mental states do exist, can we not simply say that our data are the qualities of those mental states ? This would be to rest in the traditional or " old " realism. The reason, we must repeat, for discarding this simple solution is that it is not an accurate statement of the facts. If it were, heaven knows we should all be saved much bother, and the epistemological problem would long ago have been happily solved. But the persistent dissatisfaction with the traditional dualism is based upon its inadequacy of analysis.

Suppose, *e.g.*, that my perceptual datum is the character-complex " a round-wheel-about-three-feet-in-diameter,-moving-away-from-me-and-now-between-this-house-and-the-next." My mental state is not round (on any theory), since the wheel is endwise towards me ; nor is it three feet in diameter, or moving away from me, or between this house and the next ; nor does it have many, if any, of the qualities connoted by the word " wheel," which more or less implicitly belong to the datum. The qualities of the mental state by means of which that essence was given (as revealed in introspection) are : an elongated oval shape of greyish colour changing position between other masses of colour, vaguely revived tactile sensations, sensations of eyeball movements, convergence and accommodation of eyes, together with all sorts of other slightly aroused mental elements. This " fringe " of mental stuff leads readily to discourse concerning a " wheel," or to bodily movements appropriate to dealing with a wheel. It is this *function* of the mental state which constitutes the " implicit affirmation " of physical existence. When a complex mental state of the sort just indicated exists, together with the readiness of the organism to act in a certain way, then

we say, and feel, that a certain datum has been " given," or has " appeared." This is all there is to " givenness." If the term " consciousness " be restricted to the cognitive relation, this is all there is to consciousness.

On another occasion my datum may be : a-round-blue-cushion-over-there. My mental state consists then, according to introspection, of the qualities : blue, round, together with the eyeball and tactile sensations, possibly a lip-motor or auditory image of the words " blue," " cushion," etc., together with the incipient tendencies to believe, speak, and act. " Blueness " here belongs to both datum and mental state. But even this may not be true, as, *e.g.*, if I see the cushion in a faint light, when it is nearly black, or through tinted glasses, and yet perceive it as a blue cushion. So it is clear that the characters that make up the datum depend more upon the associations than upon the actual characters of the mental state.

The writer of this essay has his own ontological beliefs, the exposition of which would, in his judgment, clear up this whole situation and make the epistemological theory here defended far more plausible than any mere epistemology, standing alone, can expect to be. But the limitations of this volume forbid its exposition here. All that can be said here, then, is that mental states exist with all the qualities which make our data " appear "—*i.e.* make us suppose certain quality-groups to exist about us. The exigencies of life have made us interested not primarily in mental states but in outer objects. When, therefore, those mental states exist which are directly caused by the messages coming from outer objects, we give our attention at once to the *objects*, adjust our bodies and beliefs to their presence, picturing them by means of our mental states and their mutual interaction, and so live and move in the presence of what are, in a sense, hybrid objects—existences really there, but clothed, in our mind's eye, with the qualities which our mental states put into them. Our data are characters which may be said to be projected,

taken to be the characteristics of outer objects. Not *actually* projected—for that would bring back the difficulties we have escaped—but simply supposed to be out there, "imagined" out there. It is not a conscious attribution, or supposing, or projection. It is simply that common sense takes it for granted that they are out there, and has never grappled with the difficulty of how they are revealed if they are there, or what their status is when they aren't there—*i.e.* when perception is inaccurate.

Mental states are, of course, bits of sentiency. There are many times in our lives when we sink back into the mere throb of existence, without cognition. But such moments have no interest for the solution of the problem with which this volume is concerned. Whenever we are perceiving, remembering, thinking of, noticing anything, the situation becomes complicated to the degree above insisted upon. "Introspection" is such a cognitive state. Like outer perception, it gives us, strictly, merely a passing show of appearances, which may or may not be the actual character of the mental states introspected. The characteristics are taken as belonging to the mental state, *i.e.* are "introspected," by being "projected" as its qualities by the introspecting state. In so far, however, as we cease turning the opera-glass upon our own minds, and just sink into the momentary feeling, we cease *knowing* our own mental states, we just *are* our mental states.

Psychology deals with "subjective" data—*i.e.* with the characteristics of our mental states as we know them by introspection. Even in the midst of a perceptual experience, we may turn our attention to our mental state, and thereupon have a somewhat different datum. The character-complex "this outer object," and the character-complex "this mental state," are not, however, apprehended simultaneously. For example, in looking at a coin, I may have as perceptual datum the character-complex "a-round-coin-turned-slantwise-toward-me." Or I may have a sensation-datum, the character-complex "an-elliptical-brownish-image." These two somewhat diverse

essences may appear in rapid alternation, but they are not to be confused. The former is the character (more or less truly) of the outer object, which we may feel very certain is there, although there is always a bare possibility of illusion or hallucination. The latter is the character (more or less truly) of the mental state, which we may be perfectly certain is, or has just been, existent. Our knowledge of our own introspected mental states is surely much more accurate than that of outer objects, though there is a bare possibility that even the first reverberations of memory may distort them, and a greater likelihood that they may preserve only a partial record. All cognitive experiences have this tantalizing peculiarity, that they are "knowledge" of, not possession of, the existent known (if it is an existent); their validity must be tested by other means than the intuition of the moment.

Naïve realism, which wants more than this, can never have what it wants. The disappointment, the lack of absolute certainty (*practical* certitude we have, in many cases) lies not with our theory, it lies in the actual situation. The motive behind "epistemological monism" has been largely the desire for certainty, for getting right hold of the object known, rather than depending upon a fallible mind to know it. But since our knowledge is obviously fallible, any theory that seeks to accredit it as intuitive, actual *possession* of the object known is at variance with the facts. From all such theories we must return to a sober satisfaction in the situation as it is, and a marvel that our mechanism of consciousness is so admirably adapted to body forth to us the actual nature of the world in which we live.

PRAGMATISM *VERSUS* THE PRAGMATIST

PRAGMATISM *VERSUS* THE PRAGMATIST

By Arthur O. Lovejoy

I shall in this essay inquire into the logical relations of the doctrine known as pragmatism to the principal philosophical problems under consideration in this volume. Does pragmatism imply the truth of realism, or of idealism, or of neither? If it is in any sense realistic, is it so in a monistic, or a dualistic, or in some third sense? Does it, expressly or by implication, affirm, or admit, or deny, the existence of "consciousness," of "mental states," or "psychical entities"? These are the questions to which answers are to be sought.

Pragmatism is not a thing of which one can safely draw the definition from one's inner consciousness. It is, primarily, a historic complex of opinions which have been or are held by certain recent or contemporary writers, and of the arguments by which those writers have supported their opinions. It is not the product of a single logical motive or generating insight —though this is a proposition which will require proof, since many pragmatists would probably deny it. We must, therefore, at least begin our inquiry into the bearing of the pragmatist theory upon these problems by noting carefully what pragmatists themselves have had to say upon them. And since pragmatist writers are fairly many and rather various, we shall do well to devote our attention in the main to the reasonings of one representative of the school. I shall, therefore, in this paper, be concerned chiefly, though not quite

exclusively, with the writings of Professor John Dewey. Mr. Dewey not only is the most eminent and influential of the living spokesmen of the pragmatic doctrine, but he also has dealt more directly and abundantly than any other with the particular issues that interest us here ; and his personal variant of the doctrine contains certain elements, or at any rate certain emphases, which are of especial significance in the present connection.

It is not a purely expository treatment of the subject that I shall attempt. We may at least entertain as an hypothesis to be tested the supposition that some of the theses of pragmatist writers are more closely related to their central conceptions, are more genuinely " pragmatic," than others ; and we may thus be able, in the course of the analysis, to arrive at a species of rectified pragmatism which will at least have the interest and value of internal simplicity and consistency. Nor need we limit our efforts, either critical or reconstructive, to the detection and elimination of inner incongruities or redundancies. In great part the pragmatist proffers what purport to be, not simple deductions from an antecedently defined dogma, but independent " considerations," capable of being judged upon their own merits, and bearing directly upon the problems of this book. A critical appraisal of the force and pertinency of those considerations is therefore necessary, as an indispensable part of any comprehensive discussion of such problems in the light of contemporary philosophy.

It is perhaps only fair to give notice to the reader in advance that the quest to be undertaken will be neither simple nor straightforward in its course. He will perhaps find it exasperatingly devious, hesitant, full of false starts, and of revisions or reversals of results provisionally arrived at. I can only ask him to believe, or to observe for himself, that these peculiarities of the analysis are not arbitrary, and attributable to the taste of the analyst, but arise inevitably from the nature of the questions asked, taken in conjunction with the nature of the material available for answering them. A guide is not held

responsible for the character of the country over which he conducts the traveller.

I

PRAGMATISM, REALISM AND IDEALISM

Though a philosopher evades formal definitions always at the peril of confusion and misunderstanding, it nevertheless seems hardly necessary in this case to begin with a definition of pragmatism in general, irrespective of the specific aspects of it here to be considered. The customary formulas are presumably known to all persons who are at all likely to read this volume; and any attempt to review those formulas, to analyse their meanings, and to rid them of the ambiguities in which they abound, would itself be a large undertaking.[1] Pragmatism began as a theory concerning the conditions under which concepts and propositions may be said to possess meaning, and concerning the nature of that in which all meanings must consist. From this there developed a theory of knowledge, a theory of the meaning of truth, a theory of the criterion of truth, a theory of the limits of legitimate philosophical discussion, and the rudiments of a metaphysical theory. All of these have been expressed in various, and not always obviously synonymous, terms; and if we were to examine and seek to unify all of these we should hardly get, in the space here available, beyond the vestibule of our inquiry. We may, then, proceed at once to the first question to be considered, and interrogate the writings of Professor Dewey with a view to determining how pragmatism stands related to realism and to idealism—as these have been elsewhere defined in this book.[2]

[1] How large, the present writer has quite inadequately shown in a previous essay on the subject, "The Thirteen Pragmatisms," *Journal of Philosophy*, 1908.

[2] A similar question has been illuminatingly discussed by Professor W. P. Montague in a series of articles in the *Journal of Philosophy* ("May a Realist be a Pragmatist?" 1909). It is, however, as Mr. Montague's formulation of

(1) Let me first cite what seem to be definite pronouncements by our chosen representative of pragmatism in favour of thorough-going realism.[1]

" What experience suggests about itself is a genuinely objective world which enters into the actions and sufferings of men and undergoes modifications through their responses " (*C.I.* 7).

" According to pragmatism, ideas (judgments and reasonings being included for convenience in this term) are attitudes of response taken toward extra-ideal, extra-mental things " (*D.P.* 155).

" Reflection must discover ; it must find out ; it must detect ; it must inventory what is there. All this, or else it will never know what the matter is ; the human being will not find out ' what struck him,' and will have no idea where to seek for a remedy " (*E.L.* 23).

There are always some " facts which are misconstrued by any statement which makes the existence of the world problematic " (*E.L.* 297).

" One of the curiosities of orthodox empiricism is that its outstanding problem is the existence of an ' external world.' For in accordance with the notion that experience is attached to a private subject as its exclusive possession, a world like the one in which we appear to live must be ' external ' to experience, instead of being its subject-matter. Ignorance which is fatal ; disappointment ; the need of adjusting means and ends to the course of nature, would seem to be facts sufficiently characterizing empirical situations as to render the existence of an external world indubitable " (*C.I.* 25).

" Speaking of the matter only for myself, the presuppositions and tendencies of pragmatism are distinctly realistic ; not idealistic in

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it makes evident, not quite the same question as is here raised, and it is not dealt with by the same method, since no extensive review of pragmatist discussions of the subject forms a part of Mr. Montague's plan of treatment. So far as the same ground is covered, however, the conclusions of this paper are substantially the same as those expressed by Mr. Montague—though the reasons for these conclusions are, in the main, different.

[1] Writings of Professor Dewey here referred to will be cited by the following abbreviations : *D.P.*=*The Influence of Darwin upon Philosophy and Other Essays in Contemporary Thought*, 1910 ; *E.L.*=*Essays in Experimental Logic*, 1916 ; *C.I.*=*Creative Intelligence : Essays in the Pragmatic Attitude*, 1917. In the last-named volume, only the opening essay, " The Need for a Recovery of Philosophy," is by Professor Dewey.

any sense in which idealism connotes or is connoted by the theory of knowledge. . . . Pragmatism believes that in knowledge as a fact, an accomplished matter, things are 'representative of one another.' Ideas, sensations, mental states are, in their cognitive significance, media of so adjusting things to one another that they *become* representative of one another. When this is accomplished, they drop out; and things are present to the agent in the most naïvely realistic fashion. . . . Pragmatism gives necessarily a thorough reinterpretation of all the cognitive machinery—sensations, ideas, concepts, etc.; one which inevitably tends to take these things in a much more literal and physically realistic fashion than is current" (*Journal of Philosophy*, ii, 324-326).

Nor are these mere casual dicta unsupported by argument. On the contrary, Mr. Dewey devotes almost an entire essay to what appears to be a dialectical demonstration of the self-contradictory character of even a problematical idealism. True, he describes his argument, at the outset, as if it were a proof of quite another conclusion. He announces it as a demonstration that the question of the existence of an external world is one which cannot logically be asked—that it is "not a question at all."[1] And this might naturally be taken for a contention as adverse to the realist as to the subjectivist. It suggests that, since the question is meaningless, any answer to it must also be meaningless. And in another paper precisely this consequence seems to be drawn from the same contention. "On the supposition of the ubiquity of the knowledge-relation," we are told, "realism and idealism exhaust the alternatives; if [as pragmatism holds] the ubiquity of the relation is a myth, both doctrines are unreal, because there is no problem of which they are the solution."[2] From this one would gather that realism and idealism in all their forms stand equally condemned, and that the pragmatist has discovered a third way of thinking, radically different from either.

But when we inquire why (in the essay especially devoted

[1] "The Existence of the World as a Logical Problem," *E.L.* 283.
[2] *E.L.* 266.

to this topic) Mr. Dewey regards the " problem of the existence of the world " as a " meaningless " one, we discover that what he asserts is merely that the problem cannot be intelligibly formulated without *implying an affirmative answer*. It is in a statement of the question by Mr. Bertrand Russell that Mr. Dewey's discussion takes its point of departure. And Mr. Russell's question was quite unequivocally the question of physical realism. " Can we know that objects of sense . . . exist at times when we are not perceiving them ? " " Can the existence of anything other than our own hard data be inferred from the existence of those data ? " What Mr. Dewey undertakes to show is that each of Mr. Russell's ways of putting this inquiry includes terms which " involve an explicit acknowledgment of an external world." [1] Pointing out a whole series of assumptions involved—and necessarily involved—in the statement of the question, Mr. Dewey remarks : " How this differs from the external world of common sense I am totally unable to see." " Never," he concludes, " in any actual procedure of inquiry do we throw the existence of the world into doubt, nor can we do so without self-contradiction. We doubt some received piece of ' knowledge ' about some specific thing of that world, and then set to work as best we can to verify it." [2] No realist could ask for better. All that he finds his seeming critic urging against him is that his answer to the question is indubitable.[3] The problem is called " meaningless " in the sense—the rather peculiar sense—that its solution is certain and easy.

(2) Yet what seem equally plain expressions of idealism—of a " multipersonal " and temporalistic type of idealism—are also to be found in Mr. Dewey's expositions of the bearing of the pragmatic logic upon this old controversy. Nor can any one be surprised at this who is mindful of the historic

[1] *E.L.* 291.

[2] *E.L.* 302.

[3] I do not think it needful at this point to examine in detail the arguments of the essay on " The Existence of the World as a Logical Problem " in behalf of its unqualifiedly realistic conclusion.

lineage of pragmatism (as traced by William James),[1] and remembers the part played in it—especially in James's early formulations of it—by such a logical motive as the principle of parsimony and by the general temper and method in philosophy to which James gave the name of "radical empiricism"—*i.e.* the principle that philosophy "*must neither admit into its constructions any element that is not directly experienced*, nor exclude from them any element that is directly experienced." [2] James again and again reiterates that pragmatism can recognize no objects or relations that are "altogether trans-experiential." [3] At times he intimates that the pragmatist does not dogmatically deny the abstract possibility of things-in-themselves, or assert the "intrinsic absurdity of trans-empirical objects." [4] But he at any rate admits no possibility of *knowing* their existence, or of making any use of them even for logical or explanatory purposes; so that, to all significant intents and purposes, he excludes them from his universe altogether. The reality of inter-temporal "pointings" within experience, and consequently of a kind of "transcendence" of an idea by its "object" or objective, he not only admits but insists upon. "At every moment we can continue to believe in an existing *beyond*"; but "the beyond must, of course, always in our philosophy be itself of an experiential nature." And James adds that if the pragmatist is to assign any extra-perceptual reality whatever to the physical universe —if the "beyond" is anything more than "a future experience of our own or a present one of our neighbour"—it must be conceived as "an experience for itself whose relations to other things we translate into the action of molecules, ether-waves, or whatever else the physical symbols may be." It is, in short, intimated by James that if the pragmatist is not a pure Berkeleian idealist, he must at least be a panpsychist.[5]

[1] *Essays in Radical Empiricism*, 41-45.
[2] *Ibid.* 42.
[3] *The Meaning of Truth*, xvii.
[4] *Essays in Radical Empiricism*, 239.
[5] *Ibid.* 88. There is, however, in James the same strange conjunction of

This idealistic strain in the make-up of pragmatism is, as I have said, abundantly manifest in Mr. Dewey's reasonings :

" Like knowledge, truth is an experienced relation of things, and it has no meaning apart from such relation " (*D.P.* 95).

" Sensationalistic empiricism " and " transcendentalism " are both alike in error because " both of these systems fall back on something which is defined in non-directly-experienced terms in order to justify that which is directly experienced " (*D.P.* 227).

" The presentative realist [erroneously] substitutes for irreducibility and unambiguity of logical function (use in inference) physical and metaphysical isolation and elementariness " (*E.L.* 45).

" The [pragmatic] empiricist doesn't have any non-empirical realities," such as " ' things-in-themselves,' ' atoms,' ' sensations,' ' transcendental unities,' " etc. (*D.P.* 230).

" The belief in the *metaphysical* transcendence of the object of knowledge seems to have its origin in an empirical transcendence of a very specific and describable sort. The thing meaning is one thing ; the thing meant is another thing, and is a thing presented as not given in the same way as the thing which means. It is something *to be* so given [*i.e.* to be subsequently experienced directly]. . . . Error as well as truth is a necessary function of knowing. But the non-empirical account of this transcendent (or beyond) relationship puts *all* the error in one place (our knowledge) and *all* the truth in another (absolute consciousness or else a thing-in-itself) " (*D.P.* 103).

Here, then, we have the typical pragmatic subjectivism—the recognition of an inter-temporal, but the denial of a trans-

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realistic with idealistic utterances that we find in Dewey. Cf. *e.g.*, for the realistic side in James, the following:

" Practically our minds meet in a world of objects which they share in common, which would still be there, if one or several [Query: ' or all ' ?] of the minds were destroyed " (*Essays in Radical Empiricism*, 79). " The greatest common-sense achievement, after the discovery of one Time and one Space, is probably the concept of permanently existing things. However a Berkeley, a Mill, or a Cornelius may criticize it, it *works*; and in practical life we never think of going back upon it, or reading our incoming experience in any other terms " (*Meaning of Truth*, 63). " Radical empiricism has more affinity with natural realism than with the views of Berkeley or of Mill " (*Essays in Radical Empiricism*, 76).

subjective, reference in either perception or reflective thought. The interpretation suggested by these brief passages is confirmed by an examination of the argument of an essay in which our pragmatist explains at length the meaning of his "immediate empiricism." This doctrine, represented as an essential part of pragmatism, "postulates that *things are what they are experienced as. Hence if one wishes to describe anything truly, his task is to tell what it is experienced as being.*" [1] Such an empiricism recognizes "a contrast, not between a Reality and various approximations to, or phenomenal representations of, Reality, but between different reals of experience." Take, says Mr. Dewey, the case of an experience of "an out-and-out illusion, say of Zöllner's lines. These are experienced as convergent; they are 'truly' parallel. If things are what they are experienced as being, how can the distinction be drawn between illusion and the true state of the case?" The immediate empiricist replies that the distinction is at any rate not one between a reality and a non-reality, nor even between degrees of reality. The experience of the lines as divergent must in the most uncompromising fashion be called "real"; the later experience into which the first develops is another real related to the first in a particular experienced manner.

"The question of truth is not as to whether Being or Non-Being, Reality or *mere* Appearance, is experienced, but as to the *worth* of a certain concretely experienced thing. It is because this thing afterwards adjudged false is a concrete *that*, that it develops into a corrected experience (that is, experience of a corrected thing—we reform things just as we reform ourselves or a bad boy) whose full content is not a whit more real, but is true, or truer." [2]

Similar passages might be cited from other members of the school. Thus we find in Professor A. W. Moore's con-

[1] *D.P.* 228, "The Postulate of Immediate Empiricism."

[2] *D.P.* 235. I am, I confess, unable to reconcile the language of this passage with that of the following: "The Greeks were wholly right in feeling that the questions of good and ill, as far as they fall within human control, are bound up with discrimination of the genuine from the spurious, of 'being' from what only pretends to be" (*C.I.* 56-57).

tribution to *Creative Intelligence* what can only be described as a subjectivistic definition of "objectivity" itself. To the pragmatist, he observes, there is "no ground for anxiety concerning the objectivity of hypotheses," for a hypothesis "is objective in so far as it accomplishes the work whereunto it is called—the removal of conflict, ambiguity, and inhibition in conduct and affection." [1] These conflicts, inhibitions, etc., and the removal of them are, it will be observed, phases of the experience of individual minds, or, if the pragmatist dislikes that word, of individual organisms; so that everything implied by "objectivity" is, in the pragmatic theory of knowledge, to be found within the limits of individual experience.

(3) When one discovers in the utterances of a philosopher such apparent contradictions as subsist between the two sets of expressions cited above from Professor Dewey, one is bound to examine the philosopher's text more closely to see if he does not somewhere suggest a means of removing or softening the contradiction—if, for example, the appearance of it is not due to some oddity in his use of terms. When we thus interrogate the writings of Mr. Dewey, we do, in fact, find certain intimations of means of reconciling his two seemingly antithetic positions. We note, for example—as bearing upon the statement, already quoted, that ideas have to do "with extramental" things—that Mr. Dewey defines "mental" in a sense of his own:

> "We may, if we please, say that the smell of a rose, when involving conscious meaning or intention, is mental; but this term 'mental' does not denote some separate type of existence—existence as a state of consciousness. It denotes only the fact that the smell, a real and non-psychical fact, now exercises an intellectual function. . . . To be in the mind means to be in a situation in which the function of intending is directly concerned" (*D.P.* 104).

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[1] *C.I.* 97.

" When a cry of fire suggests the advisability of flight, we may, in a sense we must, call the suggestion ' mental.' But it is important to note what is meant by this term. Fire, and running, and getting burned are not mental ; they are physical. But in their status of being suggested they may be called mental when we recognize this distinctive status " (*E.L.* 50).

Here, then, we seem at first to get some help. When Mr. Dewey asserts that there are " extra-mental things," and that our ideas are conversant with them, he must, according to the definition cited, be understood to mean only that there are experienced things which do not (at a given moment) have the " distinctive status " of either " suggesting " other things or being suggested by them.

But does this make the assertion realistic or idealistic in its import ? The answer must be that it *permits* us to take this seemingly realistic utterance of Mr. Dewey's in an idealistic sense. For the " extra-mental things," the things which are not at the moment performing an " intellectual function," may, it is obvious, still be intra-experiential things. It is one of the favourite contentions of Mr. Dewey that a large part of " experience " is, in fact, non-cognitive ; that " to much the greater portion of sensory stimuli we react in a wholly non-cognitive way." [1] And it would be in keeping with his definition of " mental " to take " extra-mental " as synonymous with " the non-cognitive portion of experience." The definition, I have said, permits us to take his meaning so ; it does not, perhaps, strictly require us to do so. But if we do not so take it, we have done nothing to reconcile Mr. Dewey's declaration that pragmatism believes in " extra-ideal, extra-mental things " with the idealistic expressions which have been quoted from him. Either, then, the one passage contradicts the others, or else a harmony is to be reached by

[1] *C.I.* 49. But, as a further illustration of the difficulties to be met with in the attempt to construct a harmony of the pragmatic gospels, *cf.* the following (which I shall have occasion to cite again below) : " Experience is full of inference. There is apparently no conscious experience without inference ; reflection is native and constant " (*ibid.* 8).

construing the realistic-sounding passage, in the light of Mr. Dewey's definition of "mental," as of idealistic import. Meanwhile the conclusion and arguments of the essay on "The Existence of the World" remain unaffected by this harmonizing measure; they still appear to be hopelessly at variance with Mr. Dewey's "immediate empiricism."

There is, however, another suggestion offered for the alleviation of the seeming contradiction. It is hinted at in a phrase cited in the preceding paragraph, but is more fully developed elsewhere—best perhaps in the following passage:

"That the pragmatist is (by his denial of transcendence) landed in pure subjectivism or the reduction of every existence to the purely mental, follows only if experience means only mental states. The critic appears to hold the Humian doctrine that experience is made up of states of mind, of sensations and ideas. It is then for *him* to decide how, on *his* basis, he escapes subjective idealism, or 'mentalism.' The pragmatist starts from a much more commonplace notion of experience, that of the plain man who never dreams that to experience a thing is first to destroy the thing and then to substitute a mental state for it. More particularly, the pragmatist has insisted that experience is a matter of functions and habits, of active adjustments and readjustments, of co-ordinations and activities, rather than of states of consciousness. To criticize the pragmatist by reading into him exactly the notion of experience that he denies and replaces . . . is hardly 'intellectual'" (*D.P.* 157).

Here we have an explanation which seems to swing our interpretation of the pragmatist's position wholly over to the realistic side—and, indeed, to the neo-realistic side. He appears in this passage as an adherent of what has been named (by an unhappy verbal coinage) "pan-objectivism"—as one who denies the existence of states of consciousness altogether. An experience—such seems to be his present thesis—is not made up of a special kind of "experiential" stuff; it is simply a selected fragment of the world of "things," taken as they exist, without duplication. The question of "transcendent" or "trans-subjective" reality does not arise

in such a philosophy, for the simple reason that there is, for it, no realm of *subjective* reality for things to be " beyond."

We have come upon a feature of Mr. Dewey's philosophy so significant, especially in relation to the purposes of this volume, that it requires extended examination on its own account. To such examination the next section of this paper will be devoted; pending it, we cannot reach a conclusion as to the bearing of this thesis upon our attempt to decide where, in the last analysis, the pragmatist stands upon the question at issue between the realist and the idealist. Yet, meanwhile, one remark is already pertinent to the passage last cited. To say that experience is made up simply of things having no distinctively psychical character does not amount to realism—monistic or other—unless it implies that there also exist things which do not, at any given moment, figure in the selective groupings which constitute " experience," and that any given thing which at one moment is in the context called " my experience " may at other moments exist while absent from that or any similar context. But this last would amount to a very definite assertion of what Mr. Dewey calls " transempiricals." If, then, he means the passage last cited to be taken in the only sense in which it would serve the purpose for which it is obviously intended (namely, as a repudiation of " subjectivism "), why does he elsewhere ridicule the hypothesis of " transempiricals " ? Taking the passage to mean what it clearly seems intended to say, we have not found here any means of harmonizing Mr. Dewey's realistic and idealistic utterances; we have merely found an additional contradiction of his idealistic utterances.

II

PRAGMATISM AND THE EXISTENCE OF MENTAL ENTITIES

I turn to consider at length, both for its own sake and for its bearing upon the matter already discussed, the prag-

matist's view upon the question, so much debated in recent philosophy, of the reality of " psychic " existences, of " consciousness," of " mental states," and of percepts and ideas regarded as distinct, numerically and in their manner of being, from the external objects of which they are supposed to afford knowledge. The answer given to this question by any philosophy will obviously depend primarily upon its conception of the kind of situation in which knowledge consists. The two opposing views upon this question may be named " immediatism " and " mediatism." According to the former, whatever kind of entity be the object of knowledge, that object must be actually given, must be itself the directly experienced datum. According to the latter view it is of the essence of the cognitive process that it is mediate, the object never being reached directly and, so to say, where it lives, but always through some essence or entity distinguishable from it, though related to it in a special manner. Both the idealist and the monistic realist are thus " immediatists " ; to both of them—and this is the plausible consideration which makes the immediatist view a natural phase of philosophic thought — it seems unintelligible that anything deserving the name of knowledge should be possible at all, if the object supposedly known is never itself " got at," but is always at the remote end of a complicated process of causal action and of " substitution " or representation.

We have already seen one passage in which Mr. Dewey appeared to pronounce in favour of immediatism, and specifically, as it seemed, of a monistic realism, on the ground that " experience " does not consist of " mental states " which duplicate " things," but simply of " things." The passage is typical of many others. The " presentative theory " of knowledge, with its implication of the division of entities into the two classes of " psychical " and " physical," seems to arouse in the pragmatist even more than ordinary detestation. Mr. Dewey repudiates as a " fundamental mis-statement " of the

facts " the conception of experience as directly and primarily ' inner ' and psychical." [1]

" There are many who hold that hallucinations, dreams, and errors cannot be accounted for at all except on the theory that a self (or ' consciousness ') exercises a modifying influence upon the ' real object.' The logical assumption is that consciousness is outside of the real object, is something different in kind and therefore has the power of changing reality into appearances, of introducing ' relativities ' into things as they are in themselves—in short, of infecting real things with subjectivity. Such writers seem unaware of the fact that this assumption makes consciousness supernatural in the literal sense of the word ; and that, to say the least, the conception can be accepted by one who accepts the doctrine of biological continuity only after every other way of dealing with the facts has been exhausted." [2]

To the pragmatist, knowing or apprehending, or whatever it be called, is a " natural event " ; it is " no change of a reality into an unreality, of an object into something subjective ; it is no secret, illicit or epistemological transformation." Indeed, Mr. Dewey's very conspicuous dislike for what he calls " epistemology " seems to be directed in reality against the dualistic doctrine only ; for he makes it a part of his characterisation of epistemology that it assumes " that the organ or instrument of knowledge is not a natural object, but some ready-made state of mind or consciousness, something purely ' subjective,' a peculiar kind of existence which lives, moves, and has its being in a realm different from things to be known." [3] " Only the epistemological predicament leads to ' presentations ' of things being regarded as cognitions of things previously unrepresented." [4]

Against the dualistic conception of knowledge the pragmatist argues, like the idealist and the monistic realist, that it is a conception which, so far from rendering knowledge intelligible, makes it inconceivable that " the mind," shut within the circle of its own ideas, should ever make the acquaint-

[1] *C.I.* 18. [2] *C.I.* 35. [3] *D.P.* 98. [4] *C.I.* 51.

ance of an "external" world at all. "Will not some one," asks Mr. Dewey, "who believes that the knowing experience is *ab origine* a strictly 'mental' thing, explain how, as a matter of fact, it does get a specific extra-mental reference, capable of being tested, confirmed, or refuted?"[1] In truth, "the things that pass for epistemology all assume that knowledge is not a natural function or event, but a mystery"; and "the mystery is increased by the fact that the conditions back of knowledge are so defined as to be incompatible with knowledge."[2]

Here, at last—the reader will perhaps say—we have a position clearly enough defined and unequivocally asserted; and from it we may proceed confidently in the interpretation of the other and more obscure parts of the pragmatist's doctrine. Whatever else he may admit, he is emphatically opposed to epistemological dualism. Knowledge for him is no affair of "representation," and "truth" never means the "correspondence of an idea with an existence external to it." And he wishes his fundamental immediatism to be taken in a realistic, not in an idealistic, sense. Of the two parts of the traditional dualism, it is not, with Bishop Berkeley or his like, the "objects without the mind" that he eliminates from his universe, but rather the supposed mind over against the objects.

And yet it is easy to establish from Mr. Dewey's own text the exact opposite to all this; to find him arguing in effect, not only (as we have already seen) that a thorough-going physical realism is inadmissible, but also that a *monistic* realism is peculiarly untenable; that if one were to be a realist (as the term has ordinarily been understood) one must needs also accept a "presentative" and dualistic theory of knowledge. I shall show this first by an examination of two of Mr. Dewey's most extensive and carefully reasoned passages on this subject.

1. The literally presentative character of at least one type

[1] *D.P.* 104. [2] *D.P.* 97.

of knowledge—namely, *anticipatory* knowledge—could hardly be more insisted upon than by Mr. Dewey. "We have an experience which is *cognitional*" when we have one "which is contemporaneously aware of meaning something beyond itself. Both the meaning and the thing meant are elements in the same situation. Both are present, but both are not present in the same way. In fact, one is present as not-present-in-the-same-way-in-which-the-other-is. . . . We must not balk at a purely verbal difficulty. It suggests a verbal inconsistency to speak of a thing present-as-absent. But all ideal contents, all aims (that is, things aimed at) are present in just such fashion. Things can be presented as absent, just as they can be presented as hard or soft, black or white." "In the experimental sense, the object of any given meaning is always beyond or outside of the cognitional thing that means it."[1]

All this, so far as it goes, is an admirable phrasing of a dualistic epistemology. Here we have *two ways* in which data are present at the moment of cognitive experience, and one of the ways is "presence-as-absent." But this is precisely what "epistemology" has always meant by "representation." And if it is in any sense true that the dualist has ever described knowledge as a "mystery," or as other than a "natural event," it is only because he observes that a thing's presence-as-absent—even the presentation of a future physical experience, at a moment when it is not itself a physical experience

[1] *D.P.* 88, 103. While some of the phrases above cited clearly imply the full idea of representation, *i.e.* of an evocation of the represented object in idea, Mr. Dewey tends to substitute for this the notion of mere suggestion by association, as when "smoke" suggests "fire" and this prompts the act of telephoning to the fire department. There are really, in all cases of "meaning," three elements: the original sense-datum, or "cue," which initiates the process (*e.g.* the smell of smoke); the imagery thereby aroused, through which not-present *qualia* get actually, though more or less imperfectly, "presented," and presented-as-absent; and the external (*e.g.* future) things which they represent. The first two of these seem to me to become often blurred and confused with one another in pragmatist analysis of the knowledge-experience. Indeed, the existence of images and concepts is a fact which the pragmatist psychology is curiously prone to forget.

—is a distinctive and highly *peculiar* event, to which the rest of nature seemingly presents no analogue.

But Mr. Dewey's recognition of the reality of presentational knowledge is, in the important essay under examination,[1] subject to two restrictions, which are not justified by his argument.

(*a*) He apparently makes it a part of every anticipatory or prospective " meaning " that it shall involve a reference to an " operation " to be set up with a view to its own fulfilment. This amounts to an assertion that we never anticipate without proposing to ourselves some course of action with reference to the thing anticipated—an assertion which I take to be a false psychological generalization. The original pragmatic formula of James recognized " passive " as well as " active " future experiences " which an object may involve," as consistent with the pragmatist theory of meaning ; and in this he did less violence than Mr. Dewey to facts which any man, I take it, can verify for himself. To dream of some windfall of fortune which one can do nothing—and therefore intends to do nothing—to bring about, is surely a common enough human experience. Even our forward-looking thoughts may at moments be purely contemplative.

(*b*) A more significant error, and one, as I think it possible to show, which is inconsistent with a true instrumentalist logic, is Mr. Dewey's limitation of the " knowledge-experience " *exclusively* to forward-looking thoughts. While, in this essay, he actually describes all knowledge as representative, or substitutional, he does so only because he identifies all knowledge with anticipation. An intention-to-be-fulfilled-through-an-operation is part of his very definition of knowledge.[2]

[1] That on " The Experimental Theory of Knowledge," in *D.P.* 77-111.

[2] " An experience is knowledge, if, in its *quale*, there is an experienced distinction and connection of two elements of the following sort : one means or intends the presence of the other in the same fashion in which itself is already present, while the other is that which, while not present in the same fashion, *must become so present if the meaning or intention of its companion or yoke-fellow is to be fulfilled through the operation it sets up* " (*D.P.* 90).

It is to be borne in mind—and has been in the above discussion—that

Now, no doubt, a philosopher must be given license to define words as he will. It is not, however, as an arbitrary verbal definition, but as a piece of descriptive psychology that Mr. Dewey puts forward this formula. And as such it manifestly tells only half the story, at best. It ignores the patent empirical fact that many of our "meanings" are retrospective—and the specifically "pragmatic" fact that such meanings are indispensable in the planning of action. The scent of an unseen rose may beget in me an anticipation of the experience of finding and seeing the rose; but it may, quite as naturally, beget in me a reminiscence of an experience of childhood with which the same odour was associated. In the one case, as in the other, the olfactory sensation does not, in itself, "represent" anything; it merely serves as the cue which evokes the representation of something else. In both cases alike, the something else is present-as-absent; but in the latter case it is no part of the meaning of the experience that the thing meant shall ever itself "*become* present" in the fashion in which the other elements of the experience (whether the memory-evoking odour or the memory-image) are now present. That there can be no such thing as truly "instrumental," or practically serviceable, cognition without such genuine re-presentation of the past, I shall show at some length elsewhere in this paper; for the moment I am content merely to cite Mr. Dewey's testimony (in another of his essays) to the same effect. "Imaginative recovery of the bygone," he observes in *Creative Intelligence*, "is indispensable to successful invasion of the future."[1]

We thus see that inter-temporal cognition, the reference of one moment's experience to that of another moment—which

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Mr. Dewey is not here defining knowledge in the "eulogistic" sense—*i.e.* in the sense of valid judgment. He is stating, as observable facts, the generic marks of any experience "which is for itself, contemporaneously with its occurrence, a cognition, not something called knowledge by another and from without. . . . What we want is just something which takes itself as knowledge, rightly or wrongly" (*Ibid.* 76).

[1] *C.I.* 14.

is the mode of cognition with which the pragmatist is especially preoccupied—is essentially mediate and representative; and that the pragmatist himself, when he addresses himself to a plain descriptive analysis of the knowledge-situation, especially in its practical functioning, is compelled to acknowledge that it has this character. Whatever the prejudice against "presentative theories" in general which the pragmatist may share with the neo-realist, he, at least, cannot deny the occurrence of "pre-presentative" (not to speak now of "re-presentative") cognitions. Whatever his antipathy to epistemological dualism, from the dualism of anticipation (and of reminiscence) he cannot escape.

2. In one of his *Essays in Experimental Logic*, Mr. Dewey deals directly with the question of the relative logical merits of "naïve" and "presentative" realism.[1] Here, as in many other cases, he assumes toward the believer in representative knowledge and in mental entities the kindly office of the prophet Balaam. He has at the outset an alarming air of having come to curse the camp of the dualists, but in the end he remains to bless it. He begins with an apparent confutation of certain arguments supposed to be used in proof of the psychical character of perceptual data. Many "idealists"—the word is here manifestly equivalent to "believers in the existence of subjective or psychical entities as factors in experience"—have, Mr. Dewey observes, "adduced in behalf of idealism certain facts having an obvious physical nature and explanation." The visible convergence of the railway tracks, for example, is cited as evidence that what is seen is a "mental content." So with the whole series of natural illusions, and the general fact of the relativity to the spectator of the shapes and colours of visible objects, etc. All of these are taken as "proof that what one sees is a psychical, private, isolated somewhat." In reality, all these diversities of appearance of a given object are merely diverse physical effects produced by its interaction with other physical things at

[1] *E.L.* 250-263.

different points in space. The image of the railway tracks is as convergent on a camera-plate as on the retina ; the round table assumes a variety of elliptical shapes in a series of mirrors placed at different positions as truly as in the " sensations " of diversely placed percipients. Shall we then classify cameras and mirrors as " mental " ? " Take a lump of wax and subject it to the same heat, located at different positions ; now the wax is solid, now liquid—it might even be gaseous. How ' psychical ' these phenomena ! " " Taking one-and-the-same-object, the table, presenting *its* different surfaces and reflections of light to different real organisms, the idealist eliminates the one-table-in-its-different-relations in behalf of a multitude of totally separate psychical tables. The logic reminds us of the countryman who, after gazing at the giraffe, remarked, ' There ain't no such animal ! ' " To use the diversities in the physical relations and consequences of things as proofs of their " psychical nature is also to prove that the trail the rocket stick leaves behind is psychical, or that the flower which comes in a continuity of process from a seed is mental."

So far Mr. Dewey would seem to be pleasantly making game of the dualist, to the amused applause of the neo-realist. But the real point of the jest is quite other than it seems. In the first place the argument from illusions, from the relativity of perceptions, and the like has, so far as I can recall, never been used, by those who believe in " mental existences," to support the conclusion which Mr. Dewey represents them as seeking to prove by it. They employ these facts to quite a different purpose—and to a purpose which they serve exceedingly well. That purpose is the *disproof* of *monistic* realism —*i.e.* of the thesis that the percept as actually given is identical, qualitatively and numerically, with the specific object which is its cause and which is supposed to be cognized by (or, rather, in) it. For the monistic realist does *not* say that the " real object directly given in perception " is, *e.g.*, the image on my retina ; he says it is the remote and " public "

object to which my optical apparatus is reacting in its proper and undeniably physical manner. He is thereby involved in the absurdity of maintaining that, though what is present in my experience is an ellipse, and what is present in my neighbour's experience is a circle, nevertheless exactly the same entity, without duplication or diversity, *is* my neighbour's percept and mine. It is needless to dwell here upon this difficulty in monistic realism, since it is fully set forth elsewhere in this book. The point is that Mr. Dewey's ridicule applies to a wholly imaginary use of these considerations, and does naught to aid monistic realism to escape the force of the dualist's real argument.

What is more, Mr. Dewey himself adopts the very same argument, and directs it skilfully against the neo-realistic position. For he goes on to insist that, *in so far as perception is taken as having a cognitive value,* a " knowledge status," the percept and the thing known in perception can never be regarded as identical; so that the " idealistic (*sc.* dualistic) interpretation " of *knowledge* is justified. The thesis of monistic realism that " the perceived object is the real object " is in conflict with the facts of the situation, and with its own assumptions.

" It assumes that there is *the* real object. . . . (But) since it is easily demonstrable that there is a numerical duplicity between the astronomical star and its effect of visible light, the latter evidently, when the former is dubbed '*the*' real object, stands in disparaging contrast with its reality. If it is a case of knowledge, the knowledge refers to the star; and yet, not the star, but something more or less unreal (that is, if the star be ' the ' real object) is known. . . . Moreover, the thing known by perception is by this hypothesis in relation to a knower, while the physical cause is not. Is not the most plausible account of the difference between the physical cause of the perceptive knowledge and what the latter presents precisely this difference—namely, presentation to a knower ? . . . Thus, when the realist conceives the perceptual occurrence as an intrinsic cause of knowledge to a mind or knower, he lets the nose of the idealist camel into the tent. He has then

no great cause for surprise when the camel comes in and devours the tent." [1]

And, referring specifically to his earlier remarks on the physical explicability of illusions, etc., Mr. Dewey now adds: "This (physical) explanation, though wholly adequate as long as we conceive the perception to be itself simply a natural event, is not at all available when we conceive it to be an attempt at knowing its cause."

Whatever else he is, then, our pragmatist is *not* a monistic realist. For such a realist is after all epistemologically minded; he believes that our percepts make us acquainted with a real world outside of our skins—*i.e.* beyond the peripheral termini of our sensory nerves. And whoever believes this must, according to Mr. Dewey's argument, admit the numerical duality of the sensory data and the objects to which they are assumed to introduce us.

The pragmatist himself, however, it is to be remarked, professes to repudiate that belief. He escapes dualism—so the foregoing argument would seem to suggest—by rejecting the premise common to *both* kinds of realists, the premise which, when accepted, gives the dualist the best of that family quarrel. We seem once more—the pragmatist is constantly giving us these exciting moments—to be on the point of finding in pragmatism a *tertium quid*, a new insight which will enable us to escape from both horns of the traditional dilemmas. Once realize that perceptions are *not* "cases of knowledge," but are simply "natural events"—no more, no less—and your speculative worries are ended. You recapture the happy innocence, the "genuine *naïveté*," of the "plain man." "The plain man, of a surety, does not regard noises heard, lights seen, etc., as mental existences; but neither does he regard them as things *known*. That they are just things is good enough for him. By this I mean more than that the formulae of epistemology are foreign to him; I mean that his attitude

[1] *E.L.* 254-255.

to these things *as* things involves their *not* being in relation to him as a mind or a knower. He is in the attitude of a liker or hater, a doer or an appreciator." To the much harassed neo-realist, otherwise hopeless of deliverance from the dualistic logic, this avenue of escape is especially pressingly commended. "Once depart from thorough *naïveté* and substitute for it the psychological theory that perception is a cognitive presentation to a mind of a causal object, and the first step is taken on the road which leads to an idealistic system." [1]

Perhaps the hopeful reader now takes courage and exclaims, "Here, finally, is the heart of the pragmatist's mystery! He is *neither* monistic nor dualistic realist; indeed, he is neither realist nor idealist, in the usual senses of those terms. By the simple device of *regarding perception as non-cognitive* he transcends these ancient antitheses, and reaches a higher point of view from which the old controversies appear irrelevant. The Rousseau of the metaphysical world, he offers philosophy salvation from its troubles and an end to its quarrels through a return to the (intellectually) simple life."

Unhappily the reader will find this hope of speculative salvation speedily dashed by Mr. Dewey himself. One has but to read to the end of the same essay on "Naïve and Presentative Realism" to discover the author of it undoing all that he had seemed to do, by making evident the philosophical irrelevancy of the thesis that "perceptions are not cases of knowledge." For, in the closing pages of the essay, it appears that "by 'second intention' perceptions acquire a knowledge status." For example, "the visible light is a necessary part of the evidence on the basis of which we infer the *existence*, place, and structure of the astronomical star." Thus, since the body of propositions that forms natural science hangs upon perceptions, "*for scientific purposes* their nature *as* evidence, *as* signs, entirely overshadows their natural status, that of being simply natural events. . . . *For practical purposes*

[1] *E.L.* 258.

many perceptual events are cases of knowledge; that is, they have been *used* as such so often that the habit of so using them is established or automatic." [1] A man, in short, "takes the attitude of knower" as soon as he "begins to inquire"; and all of us, it would seem, depart from "thorough *naïveté*" almost as soon as we depart from our nativity. Indeed, Mr. Dewey's qualification of his assertion of the non-cognitive character of (human) perception amounts in some cases to a denial of it. "Experience," he writes, in a passage already cited in another connection, "taken free of the restrictions imposed by the older concept, is full of inference. *There is apparently no conscious experience without inference; reflection is native and constant.*" And again, in another essay: "Some element of reflection may be required in any situation to which the term 'experience' is applicable in any sense which contrasts with, say, the experience of an oyster or a growing bean vine. Men experience illness; . . . it is quite possible that what makes illness into a *conscious* experience is precisely the intellectual elements which intervene—a certain taking of some things as representative of other things." [2] Mr. Dewey hereupon adds, it is true, that "even in such cases the intellectual element is set in a context which is non-cognitive." But this, after what immediately precedes, can scarcely mean more than that the raw material of human cognition consists of bare sensory data which might by themselves very well resemble the "experience of the oyster or the growing bean vine." *Quâ* conscious and *quâ* human, experience admittedly is—if not exclusively made up of—at least natively and constantly shot through with reflection; is irremediably addicted to the habit of taking present data as disclosures of the existence and nature of things other than themselves.

Thus it appears that the "thorough *naïveté*" which, a few pages back, we saw commended to the neo-realist as his only means of escape from dualism, demands of that philosopher

[1] *E.L.* 261-262. [2] *E.L.* 3-4.

a feat of a certain difficulty for one of his intellectual parts. Not even by becoming, intellectually, as a little child shall he be saved ; no *naïveté* less thorough than that of the oyster or the bean vine will really serve him. Meanwhile, we have but to put together the two pragmatic theses which our analysis, in this section of our inquiry, has disclosed, to determine where the pragmatist himself stands—or should stand, if he would but adhere steadfastly to his own doctrines. *In so far* as our perceptual experience is taken as cognitive (we have seen Mr. Dewey maintaining), it must be dualistically interpreted ; for, if perception is a case of knowing, " the doctrine that the perceived object is the real object " cannot be justified. But (as Mr. Dewey equally maintains) for the purposes of reflection our perceptual experience *must* be taken as cognitive. Percepts *become* cases of knowledge ; and all distinctively human experience is reflective, using sensory materials as signs and evidences of existences lying beyond the immediate data. Thus the upshot of the argument as a whole is a vindication of the general epistemological view which I have called mediatism.

But (it may still be asked), even granting that—if Mr. Dewey is a representative pragmatist—the pragmatic theory of the knowledge-relation is thus dualistic (though apparently not in such a way as to prevent the pragmatist from now and then asserting the contrary view), why should this dualism be construed as justifying the belief in the existence of " mental " or " psychical " entities ? The question might be answered in an *ad hominem* way by quoting again Mr. Dewey's remarks about the consequences of letting the nose of the " idealistic camel " into the tent. But it can better be answered by considering the implications of the type of cognition of which the pragmatist is surest—namely, intertemporal cognitions—the representation at one moment of the experience of another moment. In such cognitions, as we have seen, the bit of experience which knows is existentially (because temporally) distinct from the future or past bit of

experience that is the object of knowledge. There is a representation and a somewhat represented, and no possibility of reducing them to identity.[1] Of these two, at least the one which is the representation must, in a perfectly definite sense and for plain reasons, be described as a "psychical" or "mental" existent. It is such, namely, in the sense that it is not physical—that room cannot be found for it in the physical order of nature as conceived by science. Just as the objects of a hallucination cannot be assigned to the points in "real space" at which, to the victim of the hallucination, they appear to exist, so future or past experience or experienced objects, when now represented in imagination, cannot, as such, be assigned to *any* place in *present* space. There is no mystery about the signification of the adjectives "mental" and "psychical," as I am here using them; they simply designate *anything which is an indubitable bit of experience, but either cannot be described in physical terms or cannot be located in the single, objective, or "public," spatial system, free from self-contradictory attributes, to which the objects dealt with by physical science belong.* Anything which is "present-as-absent" (when absent is used in a temporal sense) is manifestly thus psychical; for physical things, the entities of physical science, are never present in that way. A momentary cross-section of the physical universe, as science conceives it, would disclose merely a present. This present, though apprehended by us as the effect of yesterday and the preparation of to-morrow, would show us nowhere the actual content of yesterday and to-morrow; nor would it show us the content of our false memories or of our hopes destined to disappointment. And, most evidently of all, it would nowhere exhibit to us pastness or futurity as actual *attributes* of any of the things that it contained. Yet of certain contents of our experience those attributes are of the very essence. "All ideal contents, all aims (that is, things aimed at)" are, as

[1] The two have, of course, a common character or essence, and are thus "essentially" one, without detriment to their existential duality.

Mr. Dewey has remarked, present in just such fashion—*i.e.* they have the paradoxical status of presence-as-absent, which is unknown to the categories of physical description. The pragmatist or instrumentalist is in no position to deny the existence of entities "psychical" in the sense indicated, since he is insistent upon the reality of "aims" and "ideal contents" in their true character as genuinely external to their objectives and fulfilments. The only way in which he can escape from acknowledging two classes of existents, mental as well as physical, lies in acknowledging that the one class which actually exists is "mental." He cannot (while recognizing the reality of inter-temporal cognitions) set up a real physical world, and then find room in it for the ideal contents which admittedly belong to such cognitions; but he can reject the hypothesis of an independent physical world altogether, in which case he is left with *nothing but* mental—*i.e.* sensibly experienced—entities in his universe. That, then, is the alternative to which he is limited—*either* idealism or else dualism, both in the psychophysical and the epistemological sense of the latter term. A conception of knowledge which should be at once realistic and monistic is barred to him. So much, at least, seems to be a conclusion which we may regard as definitely established. I do not mean that it is a conclusion which the pragmatist can be depended upon to admit, or, at any rate, to refrain from contradicting on occasion. I mean that it is a consequence which can be seen to be implied in his most indispensable premise—namely, that we have thoughts of the future—as soon as it is also recognized that (as Mr. Dewey justly insists) these thoughts include contents which are present-as-absent, and that such contents (as he does not appear to note) are necessarily non-physical.

In this last conclusion, however, we have already gone beyond the pragmatist's text, and have drawn inferences from his premises which he himself neglects or refuses to draw. Throughout the remainder of this paper we shall be chiefly

occupied in rectifying and reconstructing the pragmatic doctrine of knowledge, and in noting how such a rectified pragmatism bears upon the problems mentioned at the outset. This does not mean that we shall make up a new doctrine out of our own heads and name it pragmatism. We shall in every case reason from principles actually held, and insisted upon, by writers of this school. But we shall find that these principles are incongruous with certain other principles, or at any rate with certain modes of argument and certain specific conclusions, which are put forward by the same writers. We shall discover a deep inner conflict in the "pragmatism" of the pragmatists, an opposition of underlying logical motives, from which the ambiguities and contradictions that we have already noted in their utterances naturally enough arise. This conflict, we shall see, is incapable of adjustment; one of the opposing principles or the other must simply be abandoned. And we shall find reasons for holding that one of these principles is not only sound in fact, but is also, in a quite definite sense, the more profoundly and distinctively "pragmatic."

III

PRAGMATISM AND KNOWLEDGE OF THE PAST

The pragmatist, as has been observed earlier in this paper, manifests a curious aversion from admitting that we have knowledge, and "true" knowledge, about the past. I have already cited from Mr. Dewey a formal definition of "knowledge" which excludes from the denotation of the term everything except judgments of anticipation. What are the reasons for this strange disinclination to acknowledge the immense importance of retrospection in the processes by which our practical knowledge is built up, and to recognize the possibility of veridical retrospection? Three reasons seem distinguishable; the third of them is the one of chief significance for our present purpose.

1. The first reason is suggested in such passages as the following :

" The finished and done-with is of import as affecting the future, not on its own account ; in short, because it is not wholly done with. Anticipation is therefore more primary than recollection ; projection than summoning of the past ; the prospective than the retrospective. Given a world like that we live in, . . . and experience is bound to be prospective in import. Success and failure are the primary categories of life " (*C.I.* 13).

" To isolate the past, dwelling upon it for its own sake, and giving it the eulogistic name of knowledge, is to substitute the reminiscence of old age for effective intelligence " (*ibid.* 14).

Here there appears to be a confusion between import and importance, signification and significance. Doubtless what makes the past important to us is chiefly its serviceableness as a guide in our efforts to shape the future ; but this does not in the least imply that what we require to know, precisely for the sake of that service, is not an actual past. We may, and in fact do, need to " *isolate* the past " provisionally, not for its own sake, but because only so we can get from it the material for processes of inference which, when completed, may enable us to construct the future in anticipation. The outcome of these processes is usually a generalization about the habits, or uniform sequences, of nature. These generalizations or laws, when formulated as such, doubtless contain an implicit reference to the future, but they also contain an implicit reference to the past ; and to discover them, we must first look the past straight in the face to see what it *was*, without first assuming the generalization (and thereby the future reference) which our retrospective inquiry may eventually justify. As Mr. Dewey himself has remarked in the same context : " Detached and impartial study of the past is the only alternative to luck in assuring success to passion." Why, then, deny to such study " the eulogistic name of knowledge," while permitting anticipation to claim that name ? Why deny to the fruits of such study, at its best, the name of

truth ? The only answer to these questions intimated in the sentences thus far quoted is the wholly irrelevant one that retrospection is, not impossible or invalid, but, under certain circumstances, useless and undesirable. What, in short, we have here is a sort of moral appraisal masquerading as a logical analysis.

2. A second reason why retrospection is the Cinderella of the pragmatic theory of knowledge is apparently to be found in the fact that the pragmatist desires to look " upon the goal and context of knowledge " not " as a fixed, ready-made thing," but as one " which has organic connections with the origin, purposes, and growth of the attempt to know it."[1] He finds it difficult to see how the data which serve in an inference can be unaffected by the intent of the inference and by the character of the particular situation in which the need for inquiry and inference originates, how " the terms of the logical analysis " can be " there prior to analysis " as " independent given ultimates."[2] But the past notoriously fails to exhibit the characteristics which the pragmatist thus desiderates in the object of knowledge. It is just blankly *there*, unmodifiable, irremediably external to the " present concrete situation," inaccessible to action either present or prospective. It consists exclusively of " independent given ultimates." It is therefore a region of existence naturally uncongenial to a philosopher determined to look upon all the contents of his universe as somehow " organically " related to his purposes and as material for the exercise of his active powers. Yet the proper inference from this uncongeniality would not seem to be that the past is not an object of knowledge, or that true judgments about it are impossible, but rather that the universe is not altogether such as the philosopher has supposed.

3. The principal reason, however, for the pragmatist's unwillingness to classify retrospection as true knowledge is plainly to be found in that subjectivistic strain in his thought

[1] *D.P.* 98. [2] *E.L.* 38-39.

of which we have already seen examples. The status of my past experience, from the point of view of a present judgment or inquiry concerning it, is precisely the same as the status of a contemporaneous but extra-subjective reality. Neither the one nor the other can now or hereafter be directly experienced ; of neither is the reality accessible to verification. If, then, truth is an *experienced* relation, true judgments about the bygone are as impossible as true judgments about such "transempirical" objects as "things-in-themselves, atoms," etc.; for the past term of the relation is also, *qua* past, a kind of "transempirical." Just as Royce and other idealists have argued with a good deal of dialectical force that, if the object of my judgment is wholly alien to and independent of my purpose or meaning, it is not clear how my judgment can be known to mean *that particular object*, so Mr. Dewey argues with respect to the past :

"Since the judgment is as a matter of fact subsequent to the event, how can its truth consist in the kind of blank, wholesale relationship the intellectualist contends for ? How can the present belief jump out of its present skin, dive into the past, and land upon just the one event (that *as* past is gone for ever) which, by definition, constitutes its truth ? I do not wonder the intellectualist has much to say about 'transcendence' when he comes to dealing with the truth of judgments about the past ; but why does he not tell us how we manage to know when one thought lands straight on the devoted head of something past and gone, while another thought comes down on the wrong thing in the past ?" (*D.P.* 160.)

The parallel with the traditional "refutations of realism" is complete. The past cannot be known because, since it is *ex hypothesi* now inaccessible to us, we can never compare it with our idea of it, nor determine which of our ideas of it are true and which false.

Mr. Dewey is not unaware of the obvious objection to this : the "Pupil" in the philosophical catechism from which I have last quoted points out that objection plainly enough. "When I say it is true that it rained yesterday, surely the object of

my judgment is something past, while pragmatism makes all objects of judgment future."[1] The pragmatist "Teacher" replies with a *distinguo*: the "content" of a judgment, he observes, must not be confused with "the *reference* of that content." "The content of any idea about yesterday's rain certainly involves past time, but the distinctive or characteristic aim of judgment is none the less to give this content a future reference and function." Both the falsity and the irrelevancy of this distinction escape the "Pupil," but will not escape the critical reader. Even if it were true (which it is not) that, as a matter of descriptive psychology, every judgment about the past contains, or is accompanied by, a reference to the future,[2] nevertheless the judgment is primarily *about* the past. The content which is "present-as-absent" in my "idea about yesterday's rain" is, more specifically, present-as-past. Not only is it past content, but the direction in which the judgment "points" is backward. It is yesterday that I "mean," and not to-morrow, and no logical hocus-pocus can transubstantiate the meaning "yesterday" into the meaning "to-morrow." No future object of experience could fulfil *that specific meaning*; it is, in very truth, a meaning intrinsically incapable of directly-experienced fulfilment. And yet it is a meaning without which our thought is unable to operate, and in the lack of which the intelligent framing of a "plan of action" would be altogether impossible. Without ever actually experiencing the fulfilment of these meanings, we nevertheless have an irresistible propensity to believe that some of them are in fact valid meanings; that they "point" at something which truly *was*, and that the qualities which belong to the given content when it is present-as-past also belonged to the actually past content for which it presents itself as standing. We have even developed a technique by means of which we believe ourselves able to distinguish

[1] *D.P.* 161.

[2] Even Mr. Dewey concedes that there is such a thing as "the reminiscence of old age" which is pure retrospection.

certain of these representations of the past as false and others as true.

But, of course, the pragmatist finds a difficulty in the fact of the unverifiability of such beliefs. By what right, he asks, do we affirm the " truth " of a retrospective belief, in the sense of some sort of present correspondence of present data with past data, when in the same breath we admit that the alleged correspondence cannot be " verified," since the two terms of it can never be brought together for actual comparison in the same experience (*i.e.* in the same *moment* of experience) ? " If," says Mr. Dewey, " an idea about a past event is already true because of some mysterious static correspondence that it possesses to that past event, how in the world can its truth be *proved* by the *future consequences* of the idea ? " [1] In other words, only upon the assumption that the idea *meant* the future in the first place, and that its supposed " truth " meant a particular kind of future experience, can the occurrence of a particular kind of future experience conceivably serve as evidence of the fulfilment of that meaning, as the mark of the idea's truth. And yet, even for the " intellectualist " (a term which here evidently signifies a believer in the possible truth of retrospective judgments as such) all verification of such judgments is present or future—at any rate, subsequent to the past content of the judgment. To suppose that we can actually " know " what the past *qua* past *was* by ascertaining at some future time what the then present is, seems to the pragmatist much like supposing that we can prove the other side of the moon to be made of green cheese by showing that grass is green and can be converted into cheese.

Here, no doubt, is the most effective and plausible part of the pragmatist's dialectical reasoning against the possibility of strictly retrospective " knowledge." Fantastic paradox though the negation of such knowledge, taken by itself, must appear to common sense, it is now evident that the paradox is embraced in the attempt to escape from a real difficulty,

[1] *D.P.* 162 ; italics in the original.

or at any rate from what intelligibly may appear as a difficulty, in the contrary view. Yet, that there is no escape here will become apparent if we remember that the essential thing about a verification, after all, is not *when* it occurs, but *what it is that is verified.* Now the matter to be verified is determined by the actual " meaning " of the particular antecedent judgment with which the verification is concerned. A judgment is its own master in deciding what it means, though not in deciding as to the fulfilment of its meanings ; and a process of verification must therefore verify what the original judgment *knew itself* to mean, or else it is without pertinency to that judgment. However singular may appear the fact that a judgment about the past should find the *locus* of its verification in the future, the singularity of the fact does not entitle us to argue backward and declare that the judgment could not have meant what it expressly presented itself as meaning—and *what the verification actually presents itself as proving.* When I point to this morning's puddles as proof that it rained last night, the puddles are the means of proof, but not the thing proved. For verification-purposes their sole interest to me is not in themselves, but in what they permit me to infer about last night's weather. If some one shows that they were made by the watering-cart, they become irrelevant to the subject-matter of my inquiry—though the same proposition about the future, " there will be puddles in the street," is still fulfilled by them. It is tedious to reiterate considerations so obvious ; but they are considerations which it is necessary to recall, in order to show how inverted is the logic by which the pragmatist seeks to persuade us of the truth of his paradox concerning retrospective knowledge.

What leads him into this paradox—and, in so far as he is consistent with his radical empiricism, into others involving the same principle—is his unwillingness to concede that a belief can ever be adequately validated indirectly, *i.e.* without the fulfilment of the belief's meaning in actual experience, the presentation as immediate data of the matters to which it

relates. Yet in rejecting indirect verification as such, he is endeavouring to transcend one of the commonest and most unescapable limitations of human thought. And he does this only because he is not pragmatist enough. A consistent application of what Mr. Dewey, at least, in his most characteristic passages, seems to mean by the "pragmatic method" would require him to place himself resolutely at the point of view of the moment of practical reflection—to stand, as it were, inside that phase of experience in which the intelligent agent is seeking means of coping with a practical problem which has arisen. A truly "pragmatic logic" would first of all be a faithful analysis of what is given and involved in that situation; and such an analysis would include an enumeration of the not-immediately-given things which it is *needful for the effective agent, at that moment, to believe or assume*—the things which, in fact, he habitually does assume—if the process of reflection is to be of any service to him in the framing of an effective plan of action. Within the limits of this deliberative moment the agent stands gazing out, as through windows, upon a whole worldful of things lying beyond those limits; and he will never act at all unless he accepts, instinctively or as a conscious assumption, various beliefs whose "meanings" are not, and could not conceivably be, fulfilled, whose truth is not and cannot be empirically verified, inside of that moment. If he is to plan a course of action in the future, he must know to some degree what the sequences and concomitances of things have been in the past. But at the moment at which he practically needs this knowledge he cannot "get at" that past; he must trust either his personal memory or the recorded results of empirical science. He also must assume that knowledge about the past is equivalent, within limits, to prediction about the future; but this, as Hume rightly showed, is a belief which is not itself susceptible of any empirical verification. The planner of action, furthermore, must assume that there is to *be* a future for him to act in; and he must believe that the future moment in which his present belief would find verification

will in fact come. And this belief, be it noted, is, from the point of view of the moment of practical reflection, as destitute of strict "verification" as a belief about the past, or about the uniformity of natural processes in past and present. The practical judgment points two ways, forward and backward; and, in so far as it *is* practical, it has to do with the not-directly-verified as much when it points forward as when it points backward. For the future moment when a given belief about a happening *shall have been* verified will not be a moment of practical deliberation with respect to that happening. The happening, as soon as the judgment that referred to it is "empirically" verified, is already a past thing, without pragmatic importance except as material for a retrospective judgment from which an inference reading forward into a new future may be derived.

Thus, all strictly "pragmatic" verification is indirect verification, based either upon instinctive assumptions or upon inference from explicit postulates; for only such verification is attainable within the limits of the moment of practical reflection, the moment in which the intelligent agent, looking before and after, seeks to determine what present course of action will give him the future experience that he desires. The pragmatist or instrumentalist logician should be the last man in the world to doubt that a given bit of direct experience can contain cognitions and make "true" judgments about things external to that direct experience; for the only judgments that are "instrumental" are those which relate to the not-experienced, and knowledge is "practical" only if it is proleptic and transcendent of the given.

Let me now, at the cost of some repetition, make clear the bearing of all this upon our main theme, by summing up in somewhat formal fashion the results of the argument of this section. Epistemologically speaking, knowledge of the past, if actual, is analogous to a knowledge of transempirical realities; for it must necessarily consist in a present *factual* correspondence of an idea or representation with an object

" pointed at " by that representation, which object, however, never is and never can be directly experienced, and therefore can never be directly compared with the idea of it. Observing this analogy, the pragmatist, under the influence of the strain of " radical empiricism " in his thought, excludes judgments about the past from his definition of " knowledge "—even when knowledge is not used in a " eulogistic " sense—and also maintains that no such judgment can properly be called " true." In this he is entirely consistent with the principle of radical empiricism ; however paradoxical the conclusion, it truly follows from *that* premise. But the arguments and distinctions by which the pragmatist seeks to justify or to soften this paradox have been seen to be unsuccessful, and to be especially out of keeping with certain features of Mr. Dewey's own account of the pragmatic logic. The pragmatist, therefore, must acknowledge that there can be cognitions of past existents, and true judgments about those existents ; that in the case of retrospection, as in that of anticipation, not only can we experience things present-as-absent, but also can meaningfully *believe* that the characters which as present they bear are the same characters which they bear as absent. It follows from this conclusion about retrospective knowledge that the pragmatist has no reason for denying *in principle* the possibility of a knowledge of " transempiricals." The whole series of arguments which pragmatist writers have taken over from the idealists to show that knowledge cannot consist in a " static " correspondence of a representative datum with a not-present reality is essentially foreign to the pragmatic method. If we can have meaningful and legitimate beliefs about past (or future) events now inaccessible to direct experience, we may conceivably hold meaningful and legitimate beliefs about contemporaneous existents inaccessible to direct experience. Whether we have equally good reasons for, or an equally irresistible propensity to, the latter belief, is another question. We shall get a partial answer to that question in the next section, where we shall find the pragmatists agreeing

with the greater part of mankind in the belief in at least one sort of contemporaneous existent essentially inaccessible to the direct experience of the believer.

IV

PRAGMATISM AND KNOWLEDGE OF OTHER SELVES

We have seen Mr. Dewey making use, in his idealistic-sounding passages, and especially in his formulation of "immediate empiricism," of a distinction between "transcendent" or "non-empirical" objects (which pragmatism is in these passages declared to repudiate) and "that which is directly experienced." This distinction, however, remains ambiguous until we ask whose experience is referred to. Knowledge, it will presumably be agreed by the pragmatist, is a thing achieved by and belonging primarily to individual persons or organisms. Psychologically considered, the knowledge-experience is a private experience, however public be the objects with which it deals; and non-cognitive experience would seem to be even more obviously multiple and discrete. When, then, the pragmatist repudiates "transempiricals," does he refer to entities which transcend *my* direct experience (past, present, and future) or to those which transcend *everybody's* direct experience?

The latter is, of course, what he really intends. Pragmatists have always been admirably mindful of the fact that man is a social animal, and have looked upon this fact as one which philosophy cannot afford to regard as irrelevant to its problems, even to its so-called theoretical problems. Mr. Dewey's philosophy has aimed not only at a logic of action and "operation," but also at a logic of social interaction and co-operation. The pragmatist, then, would not deny—would, in fact, affirm—that in a knowledge-experience of my own there may be "present-as-absent"—*i.e.* may be represented—the knowledge-experience, or the non-cognitive experiences, of others.

Yet this admission of the reality of a knowledge of experiences never directly experienced by the organism which does the knowing is incongruous with the logic of "immediate empiricism." Upon his empiricist principles, what the pragmatist *ought* to mean by his rejection of all "transempiricals" is a denial of the possibility of knowing existents which transcend the experience of the knower. For, once more, the pragmatist's immediate empiricism purports to be an account of what is involved in a cognitive situation. It is, in spite of the pragmatist's dislike of the word "epistemology," essentially an epistemological doctrine. It is, indeed, open to the pragmatist to add to this doctrine a metaphysical spiritualism, if he so desire; he may, for example, as James suggested, be a panpsychist. But it is not by a direct or a legitimate inference from his radical empiricism that he will be led to the metaphysical generalization that all existents are of a psychic nature. On the contrary, such a generalization implies a claim to a kind of knowledge which radical empiricism should declare to be impossible; it implies that A's experience can "mean" realities which *he* neither now nor at any time experienced directly, and that he can make true judgments which he can never directly verify. If Peter can know Paul, though Paul is never merely an experience of Peter's, then there is no reason, *so far as the nature of knowing goes*, why Peter should not know "atoms" or any other entities which are existentially other than his experience, or Paul's, or anybody's.

If Mr. Dewey had applied the logic of immediate empiricism as consistently to the question of the knowledge of other minds and their experiences as to the question of knowledge of the past, we should have found him raising the same difficulties in the one case as in the other. He would have asked: "Since Peter's judgment about Paul is as a matter of fact external to Paul's existence, how can its truth consist in the kind of blank wholesale relationship the intellectualist contends for? How can Peter's belief jump out of his skin—physical

or psychological—and land upon just the one Other Self which, by definition, constitutes its truth ? " It would have appeared evident to a consistent " immediate empiricist " of a pragmatic type, that the only Paul that Peter could " mean " was a Paul existing wholly within Peter's experience, and existing wholly as a means, or obstacle, to the future realization of Peter's plan of action. The really " radical " empiricist would have professed that an " automatic sweetheart " was good enough for him ; or he would have followed the neo-realist in the attempt to show that somehow, when Peter is thinking of Paul, Peter and Paul become so far forth identical. But, in point of fact, Mr. Dewey has far too profound a sense of the real nature of social experience to carry out his " immediate empiricism " consistently. He knows well that such experience presupposes the genuine existential otherness of the social fellow, and that distinctively social action begins only when I look upon my neighbour, not merely as a means or obstacle to my own ends, but as an end in himself.

Here again, then, we find the pragmatist committed to a position which is, in its epistemological principle, both realistic and dualistic.

V

SUMMARY : THE EPISTEMOLOGY OF A CONSISTENT PRAGMATISM

If space permitted, it would now be in order to go on to examine into the implications of a rectified and consistent pragmatism with respect to a specifically *physical* realism. That, however, is a question which it is impossible to discuss adequately within the limits of the space still remaining to me. For the present occasion, then, I must be content with the results, in relation to the questions set down at the beginning, which have thus far been reached. And the most significant of those results may now be summed up in a sentence. *A consistent pragmatism must recognize :*

(a) *That all "instrumental" knowledge is, or at least includes and requires, "presentative" knowledge, a representation of not-present existents by present data;*

(b) *That, pragmatically considered, knowledge is thus necessarily and constantly conversant with entities which are existentially "transcendent" of the knowing experience, and frequently with entities which transcend the total experience of the knower;*

(c) *That, if a real physical world having the characteristics set forth by natural science is assumed, certain of the contents of experience, and specifically the contents of anticipation and retrospection, cannot be assigned to that world, and must therefore be called "psychical"* (i.e. *experienced but not physical*) *entities;*

(d) *That knowledge is mediated through such psychical existences, and would be impossible without them.*

VI

THE TRUE PRAGMATISM AND THE FALSE

It would, perhaps, be too sanguine to hope that this essay may serve to convert some pragmatists to pragmatism, and thereby to an acceptance of the four propositions just given. History affords but few examples of mature philosophers converted by the reasonings of other philosophers. Yet such a hope will possibly have a slightly greater chance of realization if, before concluding, I set down in more general terms and in a more connected manner the meaning and grounds of that distinction between "true" pragmatism and its aberrations which I have already suggested, especially in the discussion of the pragmatist's treatment of retrospective judgments. I will therefore state first what I conceive to be the fundamental and essential insight of pragmatism, at least of that form of it which we owe chiefly to Professor Dewey; and will then show through what process this was distorted into its own implicit negation.

Pragmatism seeks to be a *philosophy of man as agent, and as reflective agent, in a physical and social environment.* That man is, in fact, such an agent, and is such specifically in his cognitive capacity, it perceives to be the distinctive presupposition of human experience; and in this presupposition it finds a fixed point from which philosophical inquiry may set out and a criterion by which the tenability of other philosophical hypotheses may be judged. To deny this assumption, to maintain that consciousness, even when it takes the form that we call planning, is only "a lyric cry in the midst of business," is, as the pragmatist sees it, to contradict what is implicitly taken for granted in every reflective activity of man; it is to deny what is necessarily assumed by every farmer, every physician, every engineer, every statesman, and every social reformer. That knowing is "functional," that it "makes a difference," and does so by virtue of those characteristics which are distinctive of it *as* knowing;[1] and that, on the other hand, its character and method cannot be understood without a consideration of its functional significance; these seem to me the deepest-lying premises of the philosophy of Mr. Dewey and of some other pragmatists.

To have formulated the starting-point and a guiding principle (I do not say *the* guiding principle) of philosophy in this way is to have done a notable service to philosophical thought. For this is in truth an essentially new way of approaching many old problems, especially the problem of knowledge; and, subject to certain qualifications, it is, in my opinion, a sound and fruitful way. Only, as I cannot but think, the pragmatists themselves have as a rule, at a rather early stage

[1] It is, for example, on the ground of the principle indicated that Mr. Dewey repudiates absolute idealism and every "eternalistic" sort of doctrine about the nature and function of thought. "A world already in its intrinsic structure dominated by thought, is not a world in which, save by contradiction of premises, thought has anything to do. . . . A doctrine which exalts thought in name, while ignoring its efficacy in fact (that is, its use in bettering life), is a doctrine which cannot be entertained or thought without serious peril" (*C.I.* 27-28).

of their reasonings, wandered from that way into very different and less trustworthy paths.

One of the earliest [1] and the most serious of these aberrations consisted in the identification of the pragmatic principle —in its bearing upon the problem of knowledge—with the "principle of radical empiricism." It would be easy to show the natural confusions of ideas through which this identification took place; but it is not necessary to our present purpose. That the two principles, so far from being identical with or inferrible from one another, are essentially antipathetic, and lead to contrary conclusions on ulterior questions, has been illustrated in the foregoing pages by several specific examples. A truly pragmatic method applied to the problem of knowledge would inquire how thought or knowledge is to be construed when it is regarded as a factor acting upon and interactive with a physical and social environment. And the first step in the procedure would be to sharpen, to make precise, the time-distinctions pertinent to this inquiry. For the pragmatic method is necessarily a special form of what I have elsewhere referred to as the "temporalistic method"; and to this aspect of pragmatism Mr. Dewey on occasion has given clear expression. "A philosophical discussion of the distinctions and relations which figure most largely in logical theories depends upon a proper placing of them in their temporal context; and in default of such placing, we are prone to transfer the traits of the subject-matter of one phase to that of another, with a confusing outcome." [2] This is a golden saying; and, as I have said, it is a proper consequence of the primary pragmatic insight. To define

[1] Not the only one, nor perhaps the earliest of all. At least four other latent or explicit logical motives distinct from the genuine pragmatic principle and tending to pervert or to contradict it, are distinguishable in Mr. Dewey's reasonings alone—and several more in the writings of other pragmatists. But a complete enumeration of these is not indispensable here.

[2] *E.L.* 1. *Cf.* Mr. Dewey's comment on the great service rendered by William James "in calling attention to the fundamental importance of considerations of time for the problems of life and mind."

knowledge in terms of the elements of the situation in which the reflective agent, or would-be agent, finds himself is to focus the attention of the logician upon a situation in which time-relations and time-distinctions are of the essence.

" Radical empiricism," however, is a doctrine about knowledge which, when consistent, characteristically ignores time and temporal distinctions. It is a philosophy of the instantaneous. The moving spring of its dialectic is a feeling that knowledge means immediacy, that an existent is strictly " known " only in so far as it is given, present, actually possessed in a definite bit of concrete experience. If we apply the demand for temporalistic precision to this assumption, we are obliged to construe it as meaning that a thing is known at a given moment of cognition only if it is both existent and immediately experienced *within the time-limits of that moment.* But to demand in this sense that philosophy shall " admit into its constructions only what is directly experienced " is to forbid philosophy to admit into its " construction " of the knowledge-situation precisely the things that are observably most characteristic of and indispensable to that situation, *qua* functional—and also *qua* social. For the moment of practical deliberation is concerned chiefly with things external to the *direct* experience of that moment. What these things specifically are we have seen in part ; they consist of the various sorts of content which must be " present-as-absent " —such as representations of the future, of a past that truly *was*, of experiences not-directly-experienced (*i.e.* the experiences of others) ; and they consist, further, of judgments, with respect to these types of content, which must be assumed and can never be directly verified (in the radical-empiricist sense of verification) at the moment of their use.

What has befallen pragmatism, then, is that, under the influence of " radical empiricism," the pragmatist philosophers have confounded their temporal categories. A " proper placing " of the knowledge-situation " in its temporal context " (and, I may add, in its social context) is precisely what they

have neglected. They " transfer to one phase of experience the traits of another phase." Their primary concern, as I have already remarked, should be with that particular moment in which the reflective agent is, in fact, *reflecting*, *i.e.* seeking by means of knowledge to deal with a practical exigency, looking for the mode of action which can be depended upon to bring about a desired future result. But the pragmatists have failed to segregate sharply, for the purposes of their analysis, this moment, or phase, of practical inquiry and forecast. They have sometimes tended to read into it the traits of the moment of answer or fulfilment; and they have sometimes strangely confused its traits with those of what is by definition a non-reflective and pre-cognitive phase of experience. More singularly still, they have persistently blurred the contrast between the retrospective and prospective reference of judgments, insisting that because a judgment about the past can be verified only indirectly and in the future, it therefore " refers " only to the future. Most pregnant, perhaps, of all these confusions, they have declared that truth must be " an *experienced* relation," without asking the essential questions: experienced *when* and *by whom*? For if they had definitely raised these questions, they would have recognized that this account of truth gets its seeming plausibility only if taken as meaning: " a relation of which both terms are given at the same time and in the same sense in the experience of the same experiencer." But a " truth " really corresponding to such a definition would speedily have been discovered to be the least " instrumental," the least " pragmatic," of all possible possessions. Of these primary confusions of temporal distinctions and points of view, most of the contradictions and infirmities of logical purpose which we have earlier noted in pragmatist reasoning are the results.

Thus the doctrine commonly put forward as " pragmatism " may be said to be a changeling, substituted almost in the cradle. I have here had the privilege of proclaiming the rightful heir and of pointing out the marks of identity. I

invite all loyal retainers to return to their true allegiance. If they will do so, they will, I think, find that there need be—and, over the issues which have been here considered, can be—no quarrel between their house and that of critical realism.

CRITICAL REALISM AND THE POSSIBILITY OF KNOWLEDGE

CRITICAL REALISM AND THE POSSIBILITY OF KNOWLEDGE

By James Bissett Pratt

It is the contention of the writers of this book that the view here presented is not only rational but also essentially obvious and natural. Though not identical with the position of common sense (so far as common sense can be said to maintain any definite position in so abstruse a field), it has grown directly out of common-sense views and is more nearly in harmony with them than is any other epistemological theory. It is, moreover, pre-eminently an empirical view, and it harmonizes as does no other with the facts of both normal and abnormal experience. This being the case, the fortunate reader who is innocent of the intricacies of the philosophic mind may well ask why so obvious a position should require an entire volume in its defence.

With such a query the writers of this book naturally feel considerable sympathy. In fact, the question seems so natural and justifiable that this entire essay will be devoted to an attempt to answer it. For the answer to this question does not lie upon the surface, but (like the answer to so many other questions) must be sought, in part at least, in history.

Some sort of dualistic view of mind and its objects has been common since the dawn of human thinking. It was maintained, almost as a matter of course, by Plato and Aristotle and the majority of their successors. In the early years of what is known as the period of modern philosophy, however, it received

an extreme and even distorted formulation at the hands of two very influential thinkers; and then the trouble began to brew. Descartes, constructing an absurdly exaggerated ideal of philosophic certainty—one which should make metaphysics infinitely more sure than any branch of natural science—tried an experiment in scepticism and discovered that by a great effort he could succeed in doubting everything except the immediate content of his consciousness. Thereupon, by a still greater effort, he deduced God from the fact of his idea of God; and having secured God he succeeded eventually in recreating the world. The fact that Descartes's dualism made necessary a journey all the way to God, before one could justify the reality of the closest and most commonplace objects, seemed to remove the dualistic philosophy very far from common sense, and set many men to pondering whether some simpler explanation of knowledge, and one less open to agnosticism, might not be possible.

The matter was brought to a sharper issue by John Locke. Accepting the Cartesian dualism, Locke insisted more explicitly than even Descartes had done that we can know directly only the content of our own minds. "Since the mind," he writes, "in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does or can contemplate, it is evident that our knowledge is only conversant about them. Knowledge, then, seems to me to be nothing but the perception of the connection and agreement, or disagreement and repugnancy, of any of our ideas. In this alone it consists; where this perception is, there is knowledge; and where it is not, there, though we may fancy, guess, or believe, yet we always come short of knowledge."

The natural deduction from this formulation of the realistic theory of knowledge is plain. On such a view we can never know outer objects, we can never know external events, we can never know each other, we can never know anything but our own subjective states. Each one of us simply dreams his own dream, which may or may not happen to be true. We

may " fancy, guess, or believe " if we like, but knowledge of the outer reality is made forever impossible by the iron ring of ideas within which each of us is shut up a helpless prisoner. Our ideas are, as it were, a curtain, let down between us and reality, a kind of Maya's veil, forever hiding it from our view.

It is plain that such a position as this is intolerable. Since, in the words of Aristotle, " all men by nature desire knowledge," there was little likelihood that they would be long content with a theory of knowledge which made it impossible for them to know anything outside the little circle of their own subjective states. The first to lift the banner of revolt was Bishop Berkeley. Ridiculing the Lockian philosophers for " being ignorant of what everybody else knows perfectly well," he sought to find a new way out of the Lockian prison to direct knowledge of reality. The surprising thing about Berkeley is not his dissatisfaction with Locke's iron ring of ideas and its resulting scepticism, but the method he invented for getting out of it. For, in truth, he did not even attempt to get out of it at all, but, leaving the prisoner where he was, sought to console him by the assurance that his prison was the world. Doubtless, said he, we can know only ideas ; but then there is nothing else to be known. We are all simply dreaming our dreams, but these dreams are all sent us by God, so in some sense we may be said to know Him ; and this surely should satisfy any one.

The weakness of Berkeley's subjectivism has been so often laid bare that nothing more need be said of it here. In spite of much that is fine in the thought of the very lovable bishop, one can but sympathize with the impatient tone which Kant uses in referring to the idealism of " *der gute Berkeley.*" Kant saved himself from belonging in the same condemnation by a return to the Cartesian and Lockian dualism, and by making it absolute. For the Kantian Philosophy there are two realms—the real and the knowable. The chasm between the two is impassable. All that can be known, or that could ever conceivably be known, is " mere phenomenon." The

real world of things-in-themselves is in the nature of the case unknowable.

The followers of Kant revolted against this part of his doctrine, just as Berkeley had revolted against the agnostic dualism of his master, Locke. And though the " objective idealism " of the neo-Kantians differs in many respects (upon the surface) from Berkeleian subjectivism, it resembles it in its central doctrine. And just as Berkeley had abolished the external world of Descartes, Locke, and common sense, so the neo-Kantians abolished their master's world of things-in-themselves.

For nearly a century idealism in some form or other dominated philosophy. Almost all the thinkers of to-day were brought up under its influence. Realism was banished from text-book and class-room except as a " terrible example," a kind of scapegoat concerning which professors might use violent language. The defender of it was looked at somewhat askance as crude and illogical. Not only was the doctrine untenable (having been forever refuted), but to maintain it was a mark of poor taste. This attitude was, of course, largely one of those temporary fads which at times rule in philosophy as they do in dress ; but it was to some slight extent justified by the history which we have been sketching, all of which seemed to prove that realism was a sure road to scepticism.

As we have seen, realism had led to scepticism because of the exaggerated dualism of Descartes, Locke, and Kant. Now it occurred to a few courageous philosophers at the beginning of the present century, that it might be possible to formulate realism in such a fashion as to avoid dualism. If realism could only be monistic it would apparently avoid all danger of scepticism. Thus at length arose the New Realism, a bold and very laudable protest against the dominance of idealism, an original and very clever attempt to unite a recognition of the real outer world with a monistic view of knowledge. We are not shut off from the real by our ideas, say the neo-realists ; for we know things themselves directly. No ideas

are needed to intervene; in fact, there are no such things as ideas at all. Knowledge is not a relation between a knowing subject and an object known. It is merely a special sort of relation between objects. And since objects may thus be known directly, there is no longer any danger of agnosticism.

It would ill become a realist of any school to fail to recognize the large amount of truth in neo-realism. In its attack upon idealism it has done yeoman service for philosophy, and it is amply justified in its criticism of the extreme dualism in the Lockian epistemology. Nor is its contribution to the theory of knowledge by any means wholly negative. It has performed a most fruitful piece of analysis in insisting that the data presented to our thought consist of meanings or natures—as the neo-realists style them, "neutral entities." There are, however, certain most important distinctions which need to be made clear in exactly this connection which the new realism has failed to see—the distinctions, namely, between these meanings and the sensational part of our mental states on the one hand and the existential physical objects to which the meanings are attributed on the other. From this incompleteness of analysis neo-realism has made for itself certain very grave difficulties, especially upon the questions of perception and error—difficulties which in other parts of this volume have been shown to be quite insurmountable. Locke's form of realism, moreover, in spite of the weakness pointed out above, certainly makes a strong appeal to common sense in the distinction which it draws between the psychic state and the physical object of perception. The question therefore presents itself whether realism cannot be stated in such a fashion as to avoid the mistakes of both these realistic schools and yet retain all that was indubitably true in each. The attempt to do so will not, indeed, be without its difficulties, but it is at any rate worth making.

Realism, of course, takes its start from perception; but we shall understand the nature of perception better if we first consider conception, for there are certain extremely

important distinctions to be found in both which stand out more sharply in conception than they do in the more sensuous and practical experience. If we analyse conception introspectively, we shall find, as every psychologist will tell us, a collection of revived images of various sorts—visual, auditory, verbal, with various slight kinaesthetic sensations due to incipient tendencies to reaction. One odd fact that results from a psychological study of conception must here be noted; no two people seem to find the same group of images and sensations in their respective experiences, and yet all may agree in "meaning" the same thing. Ask a dozen psychologists to analyse and describe their conception of the Roman Republic. The probability is that no two descriptions will be alike; yet all the psychologists meant, or thought of, the same object. Plainly a distinction must be made between the meaning which one entertains in conception and the particular images and sensations which introspection discovers in the process of conceiving. These are the machinery of conception, so to speak—the "vehicle," as Professor Strong expresses it, of our meaning. This meaning is that which we find directly given to our thought, and for purposes of brevity in exposition I shall therefore refer to it as the "datum." This datum or meaning is often capable of exact definition—*i.e.* it has, or rather *is*, a definable nature. As I have pointed out, however, when it is defined, it will almost invariably be seen to differ considerably from the group of revived and sensuous images which constitute the psychic state by means of which we conceive it. Thus I conceive the Roman Republic as centring at Rome and as lasting some 500 years; but the characters which introspection discovers in the psychic state (my psychological concept) consist of images and tendencies of various sorts, not one of which centres at Rome or lasts 500 years. On the other hand, when I conceive of a square table, introspection may find within my psychic state a revived visual image that is actually square. Thus the images discoverable in a concept may overlap the characters of the

meaning or "datum," but the two sets are never identical, and are always easily to be distinguished. Still another element may be found without difficulty within many concepts, so closely related indeed to what I have called the datum that it may be considered a part of it, yet plainly distinguishable from the rest of it—namely, a more or less explicit outer reference. This may be faint or nearly absent in purely mathematical or logical concepts, but strikes the attention at once in every concept of a physical and external object. When I think of the moon I can distinguish (1) images of various sorts; (2) a meaning or datum not to be identified with my introspectively discovered images; and (3) a conscious outer reference of this datum (not of the images) to a point in space some thousands of miles distant from the earth.

In perception the distinctions just pointed out are less noticeable than in conception, but a careful analysis will easily discover them. As every contemporary writer on psychology will tell us, perception contains not merely sensuous and revived images, but a large element of meaning as well. It is a commonplace of psychology that one perceives a table-top as having four right angles, but that the sensuous images by which one perceives it are of obtuse and acute angles. The characters meant and the characters sensed in perception are thus by no means identical, although it must be noted that the two groups come much nearer to coinciding than they do in conception. In most cases of perception, except that of the visual type, in fact, *all* the *sensed* qualities are included within those *meant*, though even here the two groups do not absolutely coincide, since the qualities which we mean usually extend out beyond those which we sense. This close amalgamation of the two groups of qualities makes it desirable to have a term by which we may refer to them as combined, and for this purpose I shall use the word *quality-group*. This word, in fact, I shall use in reference to both perception and conception; for in both these processes meaning and image,

though distinguishable, are closely related, and both are commonly included in the psychologist's use of the words percept and concept. When we turn from perception to pure sensation (if it is ever found) or to feeling, the " datum " and the group of psychic images coincide completely; or better, let us say, in these non-cognitive experiences there is no datum and no meaning; we simply live through or have the experience.

To return once more to perception, it is necessary to note the important place occupied in it by the third element which we distinguished in conception — namely, *outer reference* or *attribution* to some existent outer object. This may be regarded as part of the datum or meaning of perception, but it is an easily distinguishable part. It is possible, as in pseudo-hallucination, to have the full quota of psychic images with their perfectly definite meaning or datum, and yet not attribute this datum to any existent spatial object. Attribution or outer reference is thus the active side of perception. The datum is not accepted as alone and in itself an object of awareness, but is, in a sense, projected outward, by which I mean it is unreflectively affirmed of some physical object existing in an external spatial world. This important fact of the contrast between the psychic content of a percept, on the one hand, and its meaning and outer reference on the other, is sometimes neglected by those psychologists whose sole interest centres in the introspective analysis of the images found in the percept. Fortunately this is not the case with all psychologists. " We must admit," writes Professor Pillsbury, " that the naïve mind and all minds in naïve moments deal directly with objects. Secondly, these objects are not merely compounds of mental elements. . . . All that is intended is never given in the mental state. The mental content merely means what we are thinking about; it does not reproduce it or constitute it." [1] In similar fashion Professor Titchener writes: " Perceptions are selected groups of sensations, in which images are incorporated as an integral

[1] *Fundamentals of Psychology*, pp. 268-269.

part of the whole process. But this is not all: the essential thing about them has still to be named. It is this—that perceptions have meaning. No sensation means: a sensation simply goes on in various attributive ways, intensely, clearly, spatially, and so forth. All perceptions mean: they go on, also, in various attributive ways; but they go on meaningly." [1] If this testimony from two of our leading American psychologists requires corroboration, we need only turn to the two leading English psychologists, Professors Ward and Stout. "Perception as we know it," writes Professor Ward, "involves not only recognition (or assimilation) and localization or 'spatial reference,' but it usually involves 'objective reference' as well. We may perceive sound or light without any presentation of that which sounds or shines: but none the less we do not regard such sound or light as merely the object of our attention, as having only immanent existence, but as the quality or change or state of a thing, an object, distinct not only from the subject attending, but from all presentations whatever to which it attends." [2] Professor Stout is particularly emphatic upon this aspect of perception and devotes much space to its elucidation. External objects, he insists, "are cognized as existing independently of us, just as we exist independently of them." "The external thing does not consist for us merely in the sensible features by which it is qualified. There must be something to which these sensory contents are referred as attributes." [3]

Perception, then, is characterized by a meaning and an "outer reference," as well as by the sensory and revived images which fuse into what many psychologists are satisfied in describing as the "percept." This "outer reference" is both an *intention* and a *tendency to reaction*. Intention and reaction, in fact, can hardly be separated, since they grow

[1] *A Text-book of Psychology*, p. 367.

[2] From Professor Ward's article on "Psychology" in the *Britannica* (11th Edition).

[3] *Groundwork of Psychology*, pp. 90 and 97.

up in the life of the individual as aspects of the same tendency. The original sensuous "blooming buzzing confusion" of the infant gets ordered and systematized into a world of things partly because certain regularly recurring quality-groups come to be recognized as tokens or prophecies of interesting experiences which may be expected to follow upon them, but also because these quality-groups stimulate the child to certain native and acquired reactions toward external objects, the independent existence of which is implicitly recognized in the reaction. A number of psychologists, under the influence of a dangerously solipsistic point of view, seek to interpret intention wholly by the relation of a given experience to past experiences through the sense of potential memory, or to possible future experiences through the sense of expectancy. That these relations within experience play an important part in what we know as intention no one can deny. But surely if unsophisticated introspection can be trusted, they tell only part of the story. Every one who has no theory to defend will insist that it is possible for him to *intend* objects which are not within his experience. Dogmatically to deny this possibility would be simple, but far too easy; to explain it we must take into consideration not only the interpretation of one experience by another, but also the instinctive tendencies to action which form part of the child's inheritance and the acquired reactions which are grafted on to his native motor tendencies. The child's living body is an active organism placed in the midst of a world of objects, and actually acted upon by those objects and reacting in all sorts of instinctive ways upon them. The consciousness which goes with these activities *is* an implicit recognition of these external objects; it includes not only a reference of a present experience to actual past or possible future experiences, but also a real outer reference to independently existing things. This aspect, of course, is at first vague and implicit only, as are most other aspects of the infant's experience; but in time it becomes explicit, the outer object which resists one's efforts being

conceived in terms of one's own growing self. It is a centre of force or activity, and one of its chief characteristics as conceived by every naïve mind is exactly the fact that it is *not* a part of one's own experience, but is a bit of reality in its own right. Thus, under the guidance of his instinctive motor tendencies and his gradually clearing conception of the objects upon which he finds himself reacting, the child builds up his notion of a spatial world filled with *things* that act upon him, and to which he may react. This notion of an active world and of active things is woven into the very woof of his perceptive process, and in large part constitutes the difference between perception and sensation. Thus it comes about that the quality-group which the mature individual finds in the act of external perception means to him the presence of an active entity; and the *object* which he senses and reacts to is not just a group of qualities, but this active entity to which the datum is supposed to belong. Not that there is any process of inference within perception—one does not argue from the characters given in perception to an unseen object beyond. But in every act of perception the quality-group which one finds, or of which one is aware, directly *means* more than it is. As a result of all one's past experience it has come to *stand for* an active entity, which is inevitably thought of as something more than just these qualities.

In the act of perception we seldom introspect, and hence pay no attention to the psychical images which introspection *would* find if our attention were directed toward them. Nor do we ask ourselves the nature of the datum, though we usually take it to be physical, since its qualities are what we usually mean by physical qualities, and we inevitably feel that they belong to our object. When, however, in later reflection we come to think the matter over and to raise explicitly the question whether the datum presented was identical with the external object which we intended and to which we reacted, and which we conceive as existing independently of us and shareable by us with all other perceivers, we find it necessary to go beyond

the testimony of naïve perception if we are to discover the answer. We find this necessary both because various considerations are relevant which are beyond the scope of immediate perception and also because naïve perception as such has no answer to give, since the question simply does not exist for naïve perception at all. Common sense may indeed give a snap judgment upon it and insist on identifying the datum with the object; but there is no reason why common sense, which is merely primitive philosophy, should have the final decision. Various important considerations, moreover, such as the differences between the data of different perceivers and between those of the same perceiver at different times, and the facts of error and illusion, force the serious thinker to modify considerably the snap judgment of common sense. As more than one essay in this volume shows, the facts referred to make it impossible to identify either the datum or the images which introspective analysis discovers with the independent and common object which common sense, as well as all realistic philosophy, believes in. The fact that this is not realized in perception is of much less significance than the wider considerations which necessitate the conclusion; and it is hard to see any good reason why the thinker should shut his eyes to these unavoidable facts and confine himself to a description of the way one feels before one has begun to think at all.

If the quality-group found in perception is not physical, the question at once arises, What is its function and what is its relation to the external object which the perceiver instinctively means and reacts to—and which all realistic thinkers explicitly believe in? The answer to this question has, in a general way, been already indicated. In the life-economy of the individual the quality-group acts as a token of warning of experiences that may be expected, and as a stimulus to certain forms of reaction. It *means*, or *immediately implies*, to him the presence and, to a considerable extent, the nature of some active entity of which it is well for him to be aware. It is, in short, *the means of his perceiving the object.* Here, then,

the divergence of critical realism from the two other philosophical forms of realism plainly emerges. Locke and the neo-realists agree that the object of perception is the quality-group or some part of it, their disagreement arising upon the interpretation of these qualities. Critical realism differs from both in insisting that the quality-group which one finds in perception is not the object of perception but the means by which we perceive. By adopting this view the critical realist is able to avoid the difficulties about perception and error which (as other contributors to this volume will make plain) render neo-realism altogether untenable, and at the same time escape from the falsely subjective Lockian view that we perceive only our perceptions and are thus imprisoned within our ideas.

The function of the percept in perception is analogous to that of the " idea " or concept in thinking. What shall we say of the object of one's thought when one is thinking of one's dead friend ? Locke's answer to this would have to be that the object of one's thought is one's idea of the friend. The neo-realist does not like the question, but when faced with it must insist that one's present concept somehow *is* the friend (long since passed away). Critical realism denies both of these assertions and maintains that when one is thinking of one's friend the object of one's thought is exactly the friend himself. But how can one think of one's friend ? How, indeed, can one think at all ? Surely only by means of concepts. The concept is thus not the object of one's thought but the means of one's thinking, and to have a concept of one's friend *is* to think of him. In similar fashion, *to have* a percept *is* to perceive. The percept *is* not the object but is one of the tools required for perceiving the object.

I have dwelt thus long upon the nature of perception because of its fundamental position in any theory of knowledge. Perception may be called cognitive because of its *outer reference* ; as we saw a few pages back, in all sense-perception one has an innate tendency to attribute the datum to some external object. In this sense, perception may be called implicit

knowledge. But there are more complete and sophisticated forms of knowing, and in them this process of attribution or affirmation is made explicit. In Plato's words, knowledge in the full sense is a certain kind of "opinion." It makes an assertion *about* something and is therefore always mediate in its nature.[1] It is not just a bare experience. It means more than it is. In this sense therefore it involves transcendence. It is its nature to be mediate, to refer to something not itself as its object. Of course the question whether the term knowledge may not also be applied to some other form of experience is one of terminology; personally, I prefer to reserve the word knowledge for that situation in which one is forced to distinguish between the object of one's thought and the thought itself. Whether this restricted use of the word is justified or not, at any rate no one can seriously deny the existence of knowledge as thus defined, nor fail to recognize the situation in which it arises, for surely in nine-tenths of the cases to which the word knowledge is commonly applied it is "knowledge about" rather than any form of merely "immediate experience" that is meant. This, for example, is the case with nearly all scientific and historical knowledge, and in all sorts of common and practical situations in which we form opinions about anything which we do not immediately experience.

Before leaving the critical realist's view of knowledge I should add that he agrees with Plato, not only in maintaining that knowledge is opinion, but in insisting that it must be "true opinion with reason." These additional words bring up explicitly two problems about knowledge, both of which are involved in matters already discussed, but which deserve special consideration. These are: What does the trueness of an opinion consist in? and How can the critical realist judge whether an opinion is true? A separate essay would be required for adequate discussion of each of these questions.

[1] Not all the writers of this volume would subscribe to this restriction of the term.

I may here state very briefly and dogmatically the (rather commonplace) answer which critical realism makes to them. As to the first question, critical realism maintains that "an opinion is true if what it is talking about is constituted as the opinion asserts it to be constituted." [1] And as to the means of judging whether or not an opinion is true, the critical realist has nothing novel or ingenious to suggest, but merely points to the common methods of experience and reasoning which scientists, historians, judges, juries, and business men regularly use.

A doctrine of perception and knowledge such as that which I have been outlining must of course expect to meet with much criticism. While the criticisms (as well as the critics) are many in number, the most important of them may be summed up in the accusation that our doctrine leads inevitably to scepticism. The accusation is based on various grounds. In the first place, a very heterogeneous group of critics, embracing in their number recruits from idealism, pragmatism, and neo-realism, forgetting for the moment their mutual enmity, unite in the assertion that any theory which involves transcendence must surely lead to the ultimate denial of knowledge: for transcendence presupposes a chasm between knower and known, between the mind and its object, and such a chasm must make knowledge impossible. To a really empirically-minded thinker there is nothing terrifying or particularly surprising in transcendence; he has long been convinced that this world is full of a number of things, and transcendence is merely one of them. To be sure only *minds* have this characteristic of meaning more than they directly experience; but then only minds have the characteristic of meaning at all. Hence the critical realist simply writes down transcendence as one of the facts of the world, just as the physicist writes down X-rays as a special sort of fact. But while it is true that, judging by the expressions one hears,

[1] Quoted from Santayana's lecture before the British Academy, on "Philosophical Opinion in America" (vol. viii. of the *Proceedings*).

empirical philosophers would seem to be as common as blackberries, as a fact not every one that says " Experience ! Experience ! " is really an empiricist. Indeed some of the chief foes of empiricism seem to be of its own household. No one, for example, is louder in praise of empiricism than our friends the pragmatists and the neo-realists. Yet both schools unite in denying the existence of this fact of transcendence, and both apparently for the same reason. They know, namely, on *a priori* grounds that it is impossible. It is *grundsätzlich ausgeschlossen*. The seeming reference of the mind to things other than its own content must somehow be reduced to " a flat piece of substantive experience." It must be reinterpreted with more or less ingenuity so as to identify our meanings with the things that they refer to, or with " neutral entities," or else the things meant must be interpreted as just " experience " in the very vague sense in which that term is used in contemporary pragmatism. Just why we must believe that the world is so different from what it seems we have never been told—unless the " necessity " of avoiding a " chasm " between knower and known be regarded as a satisfactory reason. However the *a priori* minded may feel about the matter, the true empiricist at any rate will be but slightly impressed by the alleged necessity, nor greatly terrified by the word " chasm." Possibly one reason for this is to be found in the fact that, being an empiricist, he will remember that experience has shown him two kinds of chasm ; namely, the impassable and the passable. From the assertion, therefore, that he is confronted with a " chasm " he will not conclude *a priori* that he can never get across it. In fact, he will notice that the word *transcendence* itself plainly implies that the chasm with which it is concerned is exactly of the passable variety. Not being frightened out of his wits, therefore, by a passable chasm, he will keep his head, and in his usual prosaic fashion he will turn to the facts to see whether or not the kind of chasm really implied by transcendence actually exists.

His search need not be long. It will, indeed, be difficult

for him to find a single fact in history or in the physical sciences which does not ultimately involve transcendence. But not to speak of scientific matters, he can hardly fail to notice that whenever he thinks of another person's experience—an experience which is not his own—he is forced to recognize a " chasm " between his thought and its object of the very sort that is involved in the doctrine of transcendence. To be sure, as Professor Perry has pointed out, I may *describe* my experience to you so that you may know *about* it ; from which he concludes that my experience may become identically yours, and that, therefore, no break exists between our minds and no transcendence is required. Now it is true that we may share the same logical object ; we may have the same *datum*. But our psychic states would not thereby be made identical. Even after I have described my experience to you, it will (as an existent mental state) still be mine and *not* yours. When I describe my headache to the doctor I do not give him my headache ; if Professor Perry's view were correct, God pity the medical profession ! In the words of Professor James, the breaches between " thoughts belonging to different personal minds . . . are the most absolute breaches in nature." [1] But without taking into account even so common an event as a reference to another's experience, both transcendence and its correlative " chasm " are found *within* every individual experience whenever one refers in thought or memory to one's own past. When I think of my headache of yesterday, the object of my thought is already past, not present ; to make it present would be to transform its entire nature. The epistemologist of whatever school—whether pragmatist, idealist, or neo-realist—who insists that when I think of yesterday's headache my thought does not transcend itself and has no other object but some part or aspect of itself, has in effect gone over

[1] *Psychology*, p. 153. In insisting upon the " chasm " between the " thoughts belonging to different personal minds " I am referring to them as psychological existents. As logical entities—groups of universal qualities —it is, of course, possible that they may be identical.

to Locke's position in its extreme form, and really maintains that the mind "hath no other immediate object but its own ideas." Here surely we should have the "iron ring" with a vengeance.

And this brings me to a somewhat curious criticism levelled against our form of realism, namely, the accusation that it makes knowledge impossible in the same way that Locke's view did, by depicting both knowledge and perception as indirect. Now it is true that critical realism shares with Locke the doctrine that one's data and the things themselves—such as physical objects and other people's experiences—are not identical. The data, which are *characters*, *may*, to be sure, be the characters of the things. But the characters are logical universals, while the "things" are spatial, or at least temporal, particulars; hence the two cannot be identified. Critical realism maintains, therefore, that knowledge is mediate, and it is not at all concerned to maintain that perception is direct. Perception, for it, is direct, and is indirect, in the sense explained. Neither the object of perception nor the object of thought *is* the psychic state. A sharp distinction must be drawn between object and content, between that which is before the mind and that which is within it, between that which I intend and the particular mental state by which I intend it. If one wishes to call this kind of knowledge indirect, we shall not quarrel with the designation. Nevertheless the objects of our knowledge are, in the opinion of critical realism, exactly the things we know about, the objects of our thoughts are just the things we think about—tables and chairs, battles and stars and other people's experiences. When I think of my absent friend he is certainly not the content of my experience, but he is none the less and just as certainly the object of my thought and the only object of my thought. If the critic refuses to allow me to call my friend the *immediate* object of my thought, I may submit but I shall request a reason for the refusal. My friend is not identically part of my psychical content, one of my "ideas"; but by means of this content and these ideas,

I think of him and mean him. If this does not satisfy the critic as sufficiently immediate, will he tell us in what other fashion it is possible for me to think of my absent friend "immediately." To say that my friend is the direct object of my thought and to say that I think of him directly seem to me identical assertions.

The principle is not different in perception. If "direct perception" necessitates the identification of object with content, then certainly, for the critical realist, perception is not direct. But nevertheless he stoutly maintains that the object of perception *is* the object of perception, and he sees no reason why it should not be called the direct object. When my friend appears before me he *is* no more the content of my consciousness —no more merely one of my psychic states—than he was when absent. But by means of some of my psychic states, namely, those involved in my visual percept, I see him. There is surely nothing very abstruse here, nothing at all inconsistent with the view of common sense. Even the man in the street, who is supposed to be the chief upholder of "direct perception," knows perfectly well that it is impossible to see without eyes; and the men in most streets to-day are aware of the fact that nerves and brain-centres are also essential to seeing things— no matter how "directly." Eyes, nerves, and brain-centres are, therefore, instruments of "direct" vision. But if eyes, nerves, and brain-centres did not rouse or somehow act co-ordinately with visual images, there would be no vision whether direct or indirect. To the list of prerequisites for seeing my friend I must therefore add the quality-group present in visual perception. Having all these things I see him. He is the object of my sight. I do not see my percept of him; I see *him* and I do so by means of my percept. It is of course possible for me, if I be an introspective psychologist, to make the sensuous data involved in my vision of him the object of my *thought*. Even then, however, these sensuous data are not the object of my *sight*. And when both my eyes and my attention are directed upon him he is the object both of

my sight and of my thought. In short, percepts are simply my means of perceiving, and thoughts my means of thinking, just as the voice is my means of speaking. To insist that I cannot perceive a red house because I have to perceive it by means of my percept is like insisting that I cannot hear the organ because I can only hear its sound, or that I cannot say "Boo" because I have to say it with my voice. Critical realism, therefore, far from making of our ideas a prison-house, considers them a part of the necessary means of external reference and communication. And the criticism upon it, which at first seemed so serious, turns out to be in fact a demand that we should think without thoughts and perceive without perceptions.

But I should be doing injustice to both the critics and myself if I left the accusation of scepticism at this point. There is no denying the fact that the question how certain knowledge is possible is both crucial and difficult for every epistemological theory. And for my own part I am willing to go a long way with the critic and to confess that, on the theory which I am supporting, both what we human beings consider perception and what we consider knowledge in the more explicit and sophisticated sense are often misleading. Since on our view the mind's object is not its content, illusion may be taken for perception and error for knowledge, and the ultimate nature of reality in itself may be very difficult, or even impossible, to discover. To that extent I am forced to admit, with all humility, that critical realism is agnostic. But I would go on and ask the further question, Is not the fallible kind of perception and knowledge involved in critical realism exactly the kind of perception and knowledge which we really have? The situation which critical realism necessitates is admittedly undesirable; but does it not describe pretty well the actual state of affairs? If we could fashion the world over again more nearly to the heart's desire, very likely we should attempt to make perception "direct" (whatever that may mean!) and knowledge infallible; but the task of the epistemologist, as

I understand it, is not to describe what we should like, but to expound the conditions of knowledge actually obtaining in the somewhat unsatisfactory world we have to live in. The agnostic elements (if such one wishes to call them) really involved in critical realism I would therefore regard as merits rather than the reverse. Like St. Paul, critical realism glories in its infirmities, since by means of them it is enabled to give a more exact rendering of the truth. In fact, it is the inability of either idealism, pragmatism, or neo-realism to find any room for the possibility of illusion and error that makes all of these systems quite untenable. They have been made to order with a view to "avoiding agnosticism," and the result is that, while they may fit some ideal world of gods or angels who are never mistaken, they completely fail to apply to such very fallible beings as we.

But while critical realism makes adequate provision for error and illusion, it also leaves plenty of room for the sort of veridical perception and of trustworthy knowledge that we mortals indubitably have. The critical realist does not pretend to the possession of a theory which will make all knowledge as completely demonstrable as mathematics, but he does maintain that by far the most reasonable construction of the facts of experience points to the three following conclusions: (1) that there are other minds or centres of experience beside his own, and that there are also existent physical entities independent of the minds that know them, but which stand in some sort of causal relation to these minds—in short, the general realistic view; (2) that we human beings are so co-ordinated with the rest of nature that when our psycho-physical organisms are acting normally our percepts refer to and (in a pragmatic and functional sense) correspond with existent entities which are not part of our mental content; and (3) that we can make these various independent entities the objects of our thought, and by reasoning upon our experiences can come to conclusions about them which are true and which deserve the name of knowledge.

The charge of scepticism against our theory will be found

on analysis to consist of two related but distinguishable accusations, which may be termed practical and theoretical respectively. The first maintains that critical realism makes it impossible for us to trust our senses. Since the object is no part of our psychic content, we are asked, how can we be sure that we are not mistaken? How, in short, are we to distinguish between veridical perception and illusion? Before answering this question let me remind the reader once more that critical realism does not pretend to provide us with a bell that rings when we are right or a whistle that blows when we are wrong. Sometimes we *are* mistaken when we have no suspicion of the fact. But in the great majority of cases our senses do not mislead us. When the question arises whether one's perception is veridical or illusory, critical realism points out that one has several practical tests which taken together are sufficiently decisive and trustworthy. First of all one appeals from one of the senses to the others. If they mutually confirm one another, the veridical nature of our perception is strongly probable. But we need not rest satisfied with that. One may appeal to other persons. For a still further test one watches the supposed object function. If it works out consistently with all the rest of one's experience, and with the experience of all other observers, one concludes finally that it is no illusion that one is dealing with an existent object. Is this reasoning unwarranted? It must be so if the critic is right in his assertion that our form of realism leads to scepticism. If the critic is right, therefore, we must suppose that by an incomprehensible collection of coincidences his own senses, the senses of all other observers, and the details of the prior and subsequent experiences of all concerned conspire to deceive us. Which, we may ask, is the more reasonable construction to be put upon the situation, the elaborate hypothesis of this preposterous conspiracy of chance coincidences (which indeed is less credible than Descartes's "infinite Deceiver"), or the simple assumption that the object which we all perceive and which fits in with the totality of every one's

experience is really existent? Is not the upholder of the former explanation the true agnostic? Indeed, would it not require a mad lover of Doubt as such to support so astounding a supposition?

But the charge of scepticism on its more theoretical side goes very much deeper than the practical question, and must be recognized as a serious matter. Since upon our theory the objects which make up the "real" world are never our psychic states, our knowledge of them is always mediate. We know them *through* our percepts and ideas, we know *about* them, but we have no "acquaintance with" them in the sense that we have with our immediate psychic content. How, then, can we infer from our immediate experience to that of which we have no immediate experience? How can we be sure of its existence, or make any assertion as to its ultimate nature?

The question as to the *existence* of a world of entities in causal relation with the experiencing subject is plainly less difficult than that concerning the ultimate nature of these entities. The critical realist's belief (like every one else's) in the existence of such a world is, of course, too fundamental and spontaneous to be based on any form of reasoning; but it is justifiable by reasoning. The solipsist often seems to occupy an enviable position, but this is because he is usually pictured as merely sceptical of the position of some particular opponent rather than as actively defending his own. But since the solipsist's doctrine is either true or not true, his denial of all other views demands a defence of his own; and if a live solipsist could ever be found and induced to give a serious defence of his doctrine, his position would soon become extremely uncomfortable. The task of philosophy is to construe the facts of experience in the most reasonable manner, and the construction which the solipsist gives to them must surely be called fanciful in the extreme. To refer to no other aspect of the situation, the fact that each one of us finds such large masses of information, so many answers to ques-

tions, so much resistance to one's efforts, such new experiences, from what appears to be an outside and independent world, and not to be accounted for by anything that one finds within oneself, makes the solipsistic view altogether preposterous. And, it must be noted, the same sort of reasoning which leads to the belief in other human minds than one's own leads also to the belief in still other entities that are capable of affecting us. Not all that we learn nor all that we experience can be accounted for by the activities of what we know as other persons. Moreover, the (perfectly true) charge against critical realism suggested above, that it justifies its belief in external objects by reasoning from experience to entities never immediately experienced, bears with equal weight upon any form of "mental pluralism." I have no doubt of your inner experiences, but I never have directly experienced them as such, nor ever can I; and if I am called upon to justify my instinctive belief in your psychical existence I must have recourse to the same sort of reasoning which carries me also to the belief in an independent, non-human world of objects which are not my content nor yours.

The question of the ultimate nature of these non-human entities is, as I have said, much more obscure than that of their existence. There would be nothing obscure about it, so far as I can see, if our objects were identical with our mental content. It is not surprising, therefore, to find those schools of thought which maintain the identity of the two dealing with the question very confidently, and often in quite off-hand fashion, as if there were nothing really difficult in this most fundamental of metaphysical problems. Ultimate reality consists of "neutral entities," say most of the neo-realists. It consists of "experience," say the idealists, the majority of them meaning by this something psychical in its nature. It consists of "experience," say the pragmatists, meaning by this, God and Professor Dewey know what. The critical realists are much less self-confident. The question they consider much too difficult to be settled in any easy and *a priori*

fashion. The disagreements of philosophers upon it from the time of Thales down would seem to indicate much the same conclusion. In fact, the critical realist as such has no exhaustive theory upon the subject. For critical realism does not pretend to be metaphysics. It is perfectly possible for the critical realist to be a panpsychist, a metaphysical dualist, a Platonist, or an ontological idealist of some other type. Only so much of the metaphysical problem need critical realists be agreed upon as is required by the epistemological doctrine which they hold in common. They believe, namely, that "physical" things exist independently of being known; that they may be our objects, but that they are never our mental content; that they differ in some respects from the quality-groups of our perception (*e.g.* in not possessing the secondary qualities which we find in our percepts); but that they stand in such causal relation to our percepts that it is possible for science to investigate some of these relations and some of the relations between the physical things, and thus to gain trustworthy knowledge concerning the laws of their actions. As to any exhaustive knowledge of the inner and ultimate nature of these non-human entities, critical realism is willing to admit itself ignorant, and, in fact, hands over the question to the scientists and the metaphysicians.

The attitude of critical realism upon this question would therefore seem to be modest and undogmatic enough; but if its right to believe in so much as I have indicated be challenged, it is not without valid reasons for the faith that is in it. In defence of the view that physical entities are independent of being known, it falls back confidently upon the general anti-idealistic argument which realists of several schools have recently made so convincing, but which there is obviously no space in this essay to recapitulate. To substantiate its doctrine that these physical entities are in causal relation with human experience such that we can be affected by them, act upon them, refer to them, and hence have knowledge about them, critical realism appeals to the whole of our practical experience.

That it is at least psychologically possible for us to refer to them, think about them, and mean them, even though they have never been identically parts of our psychic content, would seem to be indicated by the very fact that our opponents and we are discussing them. While we do not pretend to an exhaustive knowledge of the inner nature of physical entities, we have defined them sufficiently to know what we mean by them, and (I trust) to make that meaning perfectly plain to every one but the perversely blind. Physical objects are not for us a mere X. They differ enormously from Kant's unknowable *Dinge an sich*. They exist in the same world with us, and constantly affect us and are affected by us through real causal relations, which are quite independent of our knowledge. They, and not merely ideal constructions of our own, are therefore the objects of physical science. The laws of their activities (in our opinion) and the relations they bear to each other and to us are perfectly capable of investigation, and the conclusions of science are to be regarded as true knowledge of reality. The doctrine of critical realism might therefore be called a practical and inborn hypothesis upon which we all act and which science constantly makes use of, and which both science and action regularly verify.

This fact is so plain that the accusation of scepticism against our view ultimately reduces itself to a reiteration of the charge that "knowledge about" can never be had without "acquaintance with," and that the divorce of content from object must in itself make knowledge of the latter forever impossible. The discussion already given to these criticisms in this essay, if it has not wearied the reader, will, I trust, have convinced him of their insignificance; but before closing I would point out that if these alleged difficulties really made knowledge impossible they would prove the critic, and every one who thinks at all, to be quite as agnostic as the critical realist is said to be. For, in the first place, in every trans-temporal reference within our experience we claim—and must have if we are to avoid agnosticism—the same sort of "knowledge about" without "acquaint-

ance with " which critical realism lays claim to. Every one believes that there *have been* past events and that we can know, by both memory and inference, what they were. Yet at the moment when such knowledge is claimed, acquaintance with these events is impossible. And it does no good to say that when they were present they were directly experienced. That assertion can *now* be made only upon the basis of what is now given. The critic of our view must assert either that when thinking of yesterday he is making it actually present, or else that he is not. If he chooses the first alternative he can easily be shown to be making nonsense of experience. If he chooses the second, he is estopped from asserting that a present datum, *in the nature of the case*, can never contain the assurance of the existence of realities which are not present data.

In short, the only argument that would really be relevant to prove our position sceptical would be an argument against every sort of mediate knowledge, and an attack upon inference as such. A suggestion of this sort, indeed, seems to be present in many of the expressions of dissatisfaction which one hears when a theory such as ours is proposed. Since we insist upon transcendence and admit that our objects are not " within the mind," and that our affirmation of their existence in the last analysis is a matter of instinctive belief and of reasoning, it is assumed that our view must lead to scepticism. For our own part, we are willing to shoulder all the scepticism which is here really implied and to abide by the trustworthiness of mediate knowledge and careful reasoning. We notice that our critics abide by it in every other field but this. Every science demands transcendence and is based on inference, as is all history. If inferential knowledge be untrustworthy, then the larger part of geology and astronomy, of chemistry and physics is only guess-work, and the historicity of Napoleon is entirely uncertain. But why speak of Napoleon, when upon this view (for most of us) Foch and the ex-Kaiser and the President of the United States must

be merely very dubious imaginings ? I said that in all fields except that of epistemology our critics accepted the trustworthiness of inference and the reality of transcendence. It was a mistake to make any exception. Every one of them, whether Berkeleian, objective idealist, pragmatist, or neo-realist, has a place in his system where he has to recognize transcendence and depend upon inference. Not one of them is willing to take seriously or follow out logically in his own system the view (which he propounds in criticizing ours) that knowledge is of the immediate type only, and that nothing can be known except what is immediately present in consciousness. The idealist asserts that his knowledge of the existence of other minds is real knowledge, as does also the pragmatist (in so far as he is not a solipsist) ; and the neo-realist asserts the same of his knowledge of things or " neutral entities " not at present within the " knowledge relation " or the " knowledge cross-section." Their rigid severity in insisting that we must be denied the use of inference which they themselves employ whenever they need it seems a bit hard on us, and is somewhat difficult to explain ; unless, like Rip Van Winkle, they think their own use of it " won't count this time " ! There is, indeed, one theory of knowledge, and one only, which is able to dispense with transcendence and inference and to assert consistently that knowledge must consist in the immediate presence of the reality known, and that theory is solipsism.

There is, therefore, no truth in the assertion that critical realism is peculiarly open to the charge of agnosticism. To be sure, those who are as determined to doubt as Descartes was, and as our critics sometimes seem to be, will always be able to throw uncertainty on the trustworthiness of our data. The shadow of a very unreasonable and purely theoretical doubt will always remain possible—on our theory and *on every other*. But it is no part of the business of philosophy either to doubt everything possible or to spend its time in search for demonstrations of the purely mathematical sort.

To do the former is morbid, to do the latter is to be led aside from nearly all the questions which are really worth solving. The business of philosophy, at least as the present writer views it, is to take the facts which experience furnishes, and to seek what on the whole is the most reasonable construction of them. If conclusions can be reached as probable and as nearly demonstrable as the conclusions of natural science, the philosopher should be satisfied. And the writers of this book believe they can show that the most reasonable conclusion from the facts of experience relevant to the problem of knowledge is the view which they call critical realism.

THE PROBLEM OF ERROR

THE PROBLEM OF ERROR

By Arthur K. Rogers

A definition of error, as I conceive that the theory represented by the present volume needs to view it, can be put very simply and briefly. It is no final refutation of a philosophy that, in order to find room for the possibility of some acknowledged kind of fact, it has to resort to extremely involved, laborious, and subtle considerations, about which its own adherents find difficulty in agreeing. But nevertheless it is not unreasonable to hold that this is a drawback, and that a more natural and obvious solution recommends in so far the point of view from which it follows. If, therefore, as I shall endeavour to show, it can be made to appear that competing theories have in this particular matter of error no satisfactory account to give, and that they either land, when ambiguities are cleared away, in highly improbable constructions of reality, or else, to become intelligible, have to adopt the very position which they in terms repudiate, I shall consider such an outcome a real recommendation of the attitude here defended.

The definition which critical realism gives of error is briefly this: When we "know" an object, we are assigning a certain "essence"—a character or group of characters—to some reality existing independently of the knowledge-process. And as truth is the identity of this essence with the actual character of the reality referred to, so error stands for the lack of such agreement, and the ascribing of an ideal character to what we are mistaken in supposing to be real, or the ascribing to a reality

of a wrong character instead of a right one. I regard it as a plain fact that, on the level of ordinary discourse, such a statement has a perfectly intelligible sense, which corresponds moreover to what the ordinary man actually intends when he speaks of truth and error. Incidentally I shall have occasion in what follows to enlarge upon certain aspects of this thesis ; for the moment it will be enough to state it, and proceed at once to a critical examination of rival doctrines.

I

OBJECTIVE IDEALISM

The difficulties which objective idealism has to meet in this connection have been often pointed out. Broadly speaking, error for the idealist is nothing but partial truth, or, perhaps better, a character descriptive of what is only a part of reality. It seems to follow from this, either that there is no error, or that there is no truth, according to the point we select to start from. If we set out from the side of the absolute, there can be no error, since the absolute is complete reality. If we begin with human knowledge, there can be no truth ; for truth and reality are identical, and of complete reality man always is bound to fall far short.

This, however, is of course too summary a way to treat a distinguished philosophy ; for it is seldom that such logical dilemmas are altogether true to an opponent's meaning. But when I try to render more explicit this meaning, I find some difficulty in making certain just where the issue is supposed to lie. To start first from the side of error, what are we to understand by the statement that there is no sheer error, but that error is always partial truth ? For such a definition as I have given, an error may be error outright and complete. And this has the apparent support of common sense. If I maintain that it rained yesterday, for common sense there are only two alternatives. Either rain actually did fall, or it did not ;

and in the latter case my judgment was simply not true at all. Here, using the language of ordinary men, is a fact, and on the other hand a human judgment about that fact. Truth and error have to do not with the fact alone—unless "truth" is loosely and confusedly identified with "reality"—nor with the judgment alone—which always is what it is—but with the relation of the two. Common sense claims simply that error depends on a failure of correspondence between the judgment's meaning and the fact itself, and that this inaccuracy, *as regards the specific point in which error lies*, is always complete. Does any verifiable and unambiguous significance attaching to the counter-claim really evade this conclusion ?

1. The first meaning I can see is this : We may intelligibly say, not indeed that the erroneous judgment is partly true, but that there is some true judgment implied or presupposed by it, or some actual character of reality utilized in its expression. I suppose it to be so, that no genuine judgment would be possible which did not have its setting in a real universe. I judge erroneously that this is Smith approaching ; at least it is likely to turn out to be a man, or, if not a man, then a physical object of some sort. But in strictness any element of "truth" here is to be regarded as something outside the actual judgment itself as a specific new contribution to knowledge. This may easily become explicit. If some one else remarks, That is Jones, and I reply, No, it is Smith, it would be forcing matters to hold that when it turned out to be Jones, and because Jones and Smith are both men, I was partly right in my contention. Whatever the assumed background, I did not *intend* this as the content of my judgment. I meant to refer, not to man-hood, but to Smith-hood ; and if I was mistaken in that, the real purpose of my judgment was completely defeated. It would be a quite different situation were I to say, There is a man, and it is Smith. If I had said this, every one would grant that I was partly right and partly wrong, though not even now that my judgment was partly

true; rather, there are here two separate judgments, one wholly true, and the other wholly false. And in other cases the claim of partial truth is even more forced; the psychological cause of my mistake, or the realities in other contexts which serve to give meaning to my words, quite obviously are not intended to enter into the content of my present reference. When Mr. Bradley, for example, says that every error must contain "some truth, since it has a content which in some sense belongs to the universe,"[1] he is ignoring the essential point that it is not the mere presence of an objective essence in a judgment that is significant, but the use to which this is put in characterizing a specific portion of reality. To hold that I am partly right about its raining yesterday because there is such a thing as rain in the world, would be to confuse plain meanings by unprofitable subtleties.

A second sort of interpretation takes the form of a claim that as truth grows by the overcoming of error, so error must be regarded as having a positive significance, as subject, therefore, not to elimination but to amplification, and so as preserved in the enlarging content of truth. But this also may have more than one meaning. We might be pointed simply to the fact that erroneous beliefs sometimes serve as an occasion for the discovery of truths. Such an interpretation can be dismissed at once; obviously all it says is that error may be *useful*, which is very different from saying that it is partially true.

In a second sense there is somewhat more plausibility to the claim that error is itself somehow retained in the resultant system of true judgments. When an hypothesis is disproved, it has not simply served as a psychological occasion for discovering truth; in a way it actually may be said to enter as a negative element into the knowledge-system. We judge truly that reality *is not* so and so, and have thereby eliminated certain possibilities, and advanced a step in the process of determining what reality is. But this again is not pertinent,

[1] *Mind* (N.S.), vol. xix, p. 162.

since the hypothesis can at best be held to persist only in so far as it was an hypothesis merely, and not an object of belief —in so far, that is, as no real element of error was present to begin with. If I do for a time run the chance of error by accepting the hypothesis as true, then just the assertion that I erroneously took as true has to be given up when it suffers correction, and so is not present in the resultant system of truth.

There remains a third and obvious sense in which no one would think of denying that erroneous beliefs—not error—may persist in a corrected and truer form. Of course when a belief is explicitly complex, there may be *parts* of it which are true, and parts which are false ; and so what taken vaguely as a whole is called erroneous may still be said to be partly true. The only important issue is, however, whether the erroneous *elements* are also partly true ; and no reference to a complex of true and false elements touches this in principle. What I am claiming is, indeed, that when such a belief is corrected, always some specific feature of it is discovered to which its inadequacy is due, and that this specific feature is eradicated, not preserved ; the elements that remain, meantime, were never in error at all.

2. I have noticed the interpretations which occur to me[1]

[1] Except what is involved in the—palpably fallacious—identification of error with what is *consciously regarded as* error. Thus Mr. Joachim writes : " It seems to follow that if A is to err, his state of mind must be *for him* true. If A's error were error *for him*, he would have passed beyond it on the way to truth " (*The Nature of Truth*, p. 131). And he goes on to suggest as a natural inference that error may therefore perhaps be regarded as nothing but a superseded stage in the development of truth, which has no being except within the wider knowledge which corrects it. Evidently all this means is that, if A is to be in error, he must *believe* that it is not error but truth ; and when he once *recognizes* it as error, his corrected belief is true. But if the idealist doctrine is simply that truth grows by the correction of error, which is seen to be error only after it is corrected, it is scarcely necessary to take so much trouble to argue it. Meanwhile, to become significant, the statement *ought* to be interpreted as denying that actual error can exist when it is not recognized as such ; this does call for proof, which, however, it will be hard to convince common sense is forthcoming.

of the claim that error is partial truth, and have found nothing which at all turns the point of the contrary contention. Let us now consider the other side—the judgment that as error is truth that is *only* partial, all human truth is partial error. Now here comes in a new and important consideration, namely, that the *object* of the judgment, the fact, is only a part of *reality*. Accustomed as he is to deal lightly with the individual human element in the world, and to think in terms of the intelligible system merely, it is perhaps natural that the idealist should be led to confuse this partial relation of the object of knowledge to the whole of reality, with the partial truth of the *judgment about* the object. But, with the distinction between truth and reality admitted, this is no longer possible. His thesis is then only relevant when we interpret it, not as referring to the claim of the judgment to be wholly true, but to be the *whole truth*. If in saying that it rained yesterday I had meant to say that yesterday nothing whatever happened except rain, then doubtless I should be in error—not partial error, however, but error complete, even though rain actually did fall. But of course I meant nothing of the sort. I did not have it in my mind to talk at all of the entire fact, but only of that special aspect which the judgment specified. And then it remains true that this either did or did not characterize the object ; there is no middle ground.

This in principle, then, is all I am able to make of the idealist's claim.[1] Mr. Bosanquet's discussion, for example, seems to reduce itself to the contention that the determination in particular of a " truth " cannot be separated from the total system of judgment with which it is connected, and that facts " depend for being discovered and warranted on an enormous constructive work of criticism." [2] This is doubtless so ; but it has to do not with the meaning of truth and error as such, but

[1] Of course I am not thinking about the entirely different question of absolute *certainty*, but only of what I mean by a thing being absolutely true, irrespective of the degree of evidence that may lead me to believe this.

[2] *Logic*, 2nd ed., vol. ii, p. 286.

with their genesis and criterion—the mental apparatus which we bring to the discovery of what beliefs in particular are true and what false, and which furnishes the source and guarantee of our confidence. If we can ask intelligently what are the reasons for holding that a belief is really true, our very form of question assumes that the fact of its being true, and the reasons for accepting this fact, are not to be identified. And there is nothing against this in the common recognition of "degrees of truth," in the sense in which, for example, the schoolboy's knowledge of the death of Charles I. is "not so true" as that of the trained historian. It is in the latter case only that Mr. Bosanquet will allow that we have what deserves to be called truth; can we, he asks, "seriously say that a judgment about [a fact] is true in which its full significance and implication is ignored?"[1] To which I should answer, Most certainly we can, though doubtless not in the same eulogistic sense of truth that Mr. Bosanquet has in mind. But this is perhaps the chief sort of methodological criticism to which the typical idealist lays himself open—his inveterate and distinctly annoying refusal to keep sharply separate the varying meanings of terms, and his assumption that if he can justify a proposition when allowed to give his own "higher" sense to the words, he has thereby refuted an adversary who intends something entirely different. When I say that the schoolboy's judgment is not so true as the historian's, what I mean is, either that he has less grounded evidence for his assurance that the fact is true, or else that it does not stand for *as much* truth, and that the historian has additional knowledge about related facts. But neither of these statements interferes with the correctness of the other judgment that, when limited to the meaning actually expressed in the words —the bare fact of Charles's death—the schoolboy's knowledge is either perfectly true or perfectly false. With the growth of the apperceptive background the *content of the judgment* of course changes. But it is not a question whether the same

[1] *Logic*, 2nd ed., vol. ii, p. 287.

form of words means the same thing to different people. It is a question whether any given meaning singly, *whatever* it may be, is successful in corresponding to the fact; and the simpler judgment of the schoolboy has *a priori* as much chance of this as the more complicated judgment of the historian. The amount of previous knowledge called for if one is to understand the meaning of a judgment has nothing to say about whether or not the judgment, once understood, is *true*—whether, that is, the new content now held before my mind as an essence really belongs to reality in the asserted context. And the possession by reality of this content is not annulled because the previous content in terms of which I had learned to interpret reality—summed up in shorthand in the subject of the judgment—is incomplete, or, even, because in some respects it is mistaken. When I learn that St. Petersburg is in the hands of revolutionists, the information is not compromised by the fact that I may have been under the impression that the city was founded by the Apostle; though the adequacy of my total fund of knowledge may be put under suspicion. What again the realist maintains is simply this, that there are elements in knowledge which may remain what they are irrespective of any new contexts into which they come. If, for example, a thing is red, it *is* red, and it does not cease to be red when we learn more about it. If there were no such core of persistent fact, and if redness changed as knowledge grew, I am unable to see how there could be any continuity at all in the advance of knowledge; each new step would be a kaleidoscopic transformation in which the preceding step would be unrecognizable.[1]

The trouble appears to be that the idealist is trying to reduce everything to systems, without taking seriously the elements out of which systems are built. An explanatory

[1] Naturally this does not mean (cf. *Joachim*, p. 94) that advance in knowledge is simply an affair of plus and minus; it involves a new *arrangement* of elements as well, and their being brought to bear in a new way on this or that concrete problem. But it is a new arrangement of *elements*.

theory may indeed be developed out of simpler hypotheses indefinitely, and so may intelligibly be said to alter with advancing knowledge. But that is because a theory is only a way of combining factual elements, and not a new element itself; with each new fact that it covers, therefore, it may undergo in so far a change of form. But it is only as the elements nevertheless still remain in some degree the same that it can be called the same theory.[1] Now it would appear, indeed, that explanation, or theory, is just what truth for the idealist normally means. Illusion presents no difficulty, says Mr. Bosanquet, because "it is simply a real, apprehended together with an untenable interpretation; and every apprehended real without any exception has attached to it some such element of illusion."[2] Of course, if one wishes to call incomplete explanation by the name of error, he has a right to do so; but no conclusions which he thereupon deduces have any bearing on claims that start from a different definition. It is doubtless so, that the complete interpretation or explanation of anything is forever beyond our grasp. But before we can explain a fact we must have something to explain; and if the facts which give rise to and enter into theory could

[1] If we insist on defining the meaning of a fact in terms of its place in a system, naturally it will cease to have that meaning outside the system; but it is the necessity for this that is in dispute. "The nature of the notes," writes Mr. Joachim, "*as constituents of the symphony*, is through and through determined by their harmonic relations in the symphony, and is in those relations not what it would be if the several notes were sounded in isolation" (p. 102; cf. also 104). If this is to be taken as implying that two combinations, one a mere collection of notes, and the other a series brought into further relationships, are not identical, of course they are not. But it still remains true that each note has *some* qualities that are the same in the two cases; and it is precisely the possession of these which leads us to choose such notes, rather than others, for our more inclusive purpose. Purposes select, they do not create outright, their material, though the material gets a new specific character in terms of its new function. To be sure one could, I suppose, fall back on the general claim that unless *everything* were what it is, *nothing* would be what it is; but this at best is a metaphysical assumption, totally out of relation to our actual human judgments in the concrete.

[2] *Philosophical Review*, vol. xxvi, p. 10.

not be grasped in their intrinsic nature except by the same infinite process which attends their combination in the form of explanatory hypotheses, it is difficult to see where we should find any solid footing. All then that the realist maintains is that, first, a judgment about a limited aspect of reality commonly intends to refer just to that aspect, and has not the least purpose of expanding to take in the universe ; and, secondly, that there is enough permanence in the structural elements, facts, or entities of which the known world is composed, to justify the assertion that a statement about one or a limited number of these may be really and completely true or false. And at least it seems to follow that any one who denies this is bound to confess to an ultimate agnosticism, which not even the doctrine of degrees of reality sensibly alleviates. If truth is identical with reality, and so if " our " truth (whatever that may be) is capable of the most unimaginable transformations, then there is not the shadow of a reason for supposing that the knowledge of the wisest philosopher is, in absolute terms, appreciably further on the way to truth than the sense-experience of the brutes ; all the unkind things the idealist is wont to remark about the one sort of knowledge might very well equally apply to the other. The only ground for his eulogistic use of " reason " must lie in the all-too-human confidence that here we are at least *approximating* to finality ; and of this who has the right to give us the slightest assurance ?

3. Meanwhile, from the standpoint of the theory I am adopting, I think it is possible to see pretty definitely where the idealist goes astray, and why it is that he cannot accept the judgment of common sense. What he is interested in is a *description* of reality solely, the ideal content that enters into a true judgment. But, in his strong disposition to turn this description of reality into reality itself, he reduces existence to logic, and ignores the fact that any description is an account of something which exists beyond the systematic statement of its character or nature. Accordingly, he possesses no way of distinguishing between truth and falsehood except by relating

a given logical content with other content, since all he has to work with is on this single horizontal plane. This is why, for example, he is compelled to hold that any objective essence whatsoever involved in a judgment lends to it a degree of truth; since this element has no other function than to combine with other elements in a system, and since it is always and necessarily a character of the real world, there is nothing for it but to admit that in so far it spells truth and reality. It is only when we recognize the further aspect of knowledge, according to which a content is assigned to a specific portion of existence which itself is not a fact of logic, that it becomes possible to see that even a single character can lend itself to a true judgment by reason of its existential presence in the universe, without our paying any heed to what the fuller description of the universe may be.

II

NEO-REALISM

1. The treatment of error by the neo-realists, to which I next turn, has two main aspects, one the more specific problem of sense-illusion, and the other the general matter of a logical definition. It is with the last that I propose chiefly to deal; but I can hardly consider it to advantage without a hasty account of the perceptual situation.

The difficulty that confronts the neo-realist is obvious. If in perception the object is literally present in the only form in which it itself possesses being, what sense attaches to the claim that some of our percepts are illusory? They are what they are, and all apparently stand on precisely the same footing. The reply of the neo-realist starts by bringing the war into the enemy's camp, and attacking that supposed subjective character of illusions which the common standpoint, from which the objection is raised, implies. In general it takes two lines, which are evidently supposed to have a measure

of identity that I have so far been unable to locate. The first line of attack is one which admits in a sense a duality, but which denies that in this there is anything that needs to be interpreted as "subjective." You maintain, the neo-realist says to his opponent, that "reproduction" proves the copy somehow to be of a different order from the original—a mental as distinct from a physical fact; but I can show you that in the external world all sorts of reproductions are to be found which no one for a moment supposes to be anything but physical; and then he points to stereoscopic cameras, shoe-last machines, and the like.[1]

I have yet to identify the philosopher who supposes that the fact of reproduction proves the mental, though he may exist. It is of course true that physical processes may have effects of a great variety of sorts in the physical realm. Such facts, in so far as they are good physics or physiology, the critical realist has not the least inclination to dispute. He only says that they do not cover what *he* means by *knowledge*. Knowing is not identical with any sort of fact that a mere appeal to physical science is competent to validate. Certainly he does not suppose, for example, that the image he talks about in knowledge is the image on the retina, or that the "mental" is describable as physical changes in the nervous system, as the illustrations of the neo-realist would seem often to imply. "Subjective" entities he does, indeed, believe in; but not at all for the reason that, finding effects more or less similar to their causes, or following them after an interval of time, he then forgets that this is a character perfectly familiar in the causal world, and argues to a new kind of existence. Rather it is because experience reveals directly to him, as he thinks, data which it is difficult to identify with a physical process and physical causation. But even these "psychical" facts he does not identify off-hand with knowledge. As even Professor Holt admits, the real point of the difficulty for neo-realism is not the existence of causally determined data,

[1] Cf. especially Holt in *The New Realism*.

whatever their nature, but the reference of qualities by the mind to an object as characterizing or describing it. This is a relationship quite different from the relationship of an effect to a cause; and no amount of industry in pointing out that a thing may have, under varying conditions, a wide variety of effects, helps in the least to relieve the difficulty in understanding how in certain cases this same variety of characters can qualify the object itself at one and the same moment as its nature. There is no trouble in seeing how an object can set up one sort of nervous process in my organism, and another, more or less dissimilar, in yours, if your organism is differently constituted. There is even no contradiction in supposing that a thing can set up a feeling of green in me and of red in you, though here we are going outside the realm in which physical science ordinarily moves, and introducing the sort of fact or quality that has always been the occasion for a belief in the psychical. But, for a theory which holds that the real object is present in perception, there *is* a genuine difficulty in believing that when one man *sees the object as* green, and the other as red, they can both be correct. "Naïve" realism assuredly does not hold that when we locate a quality in an object, all we really mean is that it has the power of producing an effect in a second and different object.[1] That the "mental state" which is the medium for an act of knowledge is, in the case alike of truth and error, a real fact in the natural world, and not as such an illusion, and that in some sense, though not in the unambiguous sense of a continuous physical series, it is causally connected with the object, exemplifying in this relationship the time-difference that is characteristic of causality, are things which the critical realist is himself anxious to maintain. But "knowing" is more than this factual situation; it involves the *belief*

[1] This, on the basis of the "causal" argument, is the way in which the neo-realist alleviates the difficulty about contradictory qualities; we have only to say that a thing *is* all of its effects. Thus a gold filling is a part of the dentist, and the cessation of pain is a part of the gold filling, and all things join in common brotherhood, in good absolutistic fashion.

that a certain character now present to the mind is the character also of the object itself. And no causal explanation of the particular form which the character takes "in the mind"—or in the organism—is enough to solve the contradiction in a belief that two opposing characters attach to the same thing, or that the thing is existentially present when at the same time it is known to be temporally absent. For this another sort of consideration will be required.

2. Accordingly there is an entirely different line which the neo-realist also takes. The burden of the new argument rests upon a theory, and leads to an important metaphysical conclusion. The point is this, that the possession of the same character is literal and absolute identity of being in every sense of the word. Let us take a crucial instance. The neo-realist has himself usually recognized that the strength of his own position lies in the perceptual realm, whereas an opponent would have a certain advantage if he were allowed to start instead with thought or memory, where there does on the surface appear to be a distinction of idea and object. Neo-realism has accordingly, in the interests of consistency, to explain the second form of knowledge by the same principle as the first. Now, how are we going to render plausible the claim that when I remember a past object, the object is there bodily and identical with the memory? According to the type of explanation first noticed, we should have to say that the memory is an effect of the original presence of the object; and on the understanding that an effect is really a part of its cause, the object is thus now present in the person of its effect. But in our second theory we have a different way of meeting the difficulty. Will it be denied that the object as remembered has, in part at least, the same characteristics as the object originally experienced? Well, then, in so far it is the same object, and in so far the object is really and identically present in the memory.[1] In this way the ground is cut very neatly from beneath any possible claim

[1] Cf. *Proceedings of the Aristotelian Society*, vol. x, p. 16.

that " dualism " could make. Since the dualist is obliged to hold that in true knowledge the character of which we are aware in having an idea of the object must be identical with the actual character of the object, he at once is told that, in spite of his desperate efforts to keep them apart, the two things coalesce. So easy is it to demolish by definition the possibility even of thinking an abhorrent fact.

It is pretty obvious where this leads; and if one is ready independently to accept the conclusion that reality is wholly logical in its character, consisting of " essences," or of terms and propositions, he will probably feel convinced that the difficulty has been solved. In other words, grant that neo-realism is true, and any objection that refuses to accept its postulates is bound to be in the wrong. But it is quite possible for a less complaisant critic to urge that such a solution will work *only* if we refuse to take account of an aspect of the world that ought to be recognized. Admit that identity of character is complete identity, and naturally there will be found no difference between things in so far as they are descriptively the same. But this is very far from a self-evident truth. I have, on the contrary, been assuming that we naturally make a clear distinction between the characters of things as embodied in meanings which we attribute to them, and the real existence of these characters in the things themselves. I have a toothache, and my neighbour has a toothache; and within limits they are qualitatively alike. But does this make them existentially the same toothache? It is only the philosopher sophisticated by a theory who would think of maintaining this. The " identity of indiscernibles " applies to abstract logical meanings, not to existents. Meanings we may call the same—provided we can detect no difference in them—just because their " character " is all there is to them; but things are not necessarily the same when they are alike. There may be two different things with the same character; then they are not the same, but similar; and what makes them two rather than one is just that something which constitutes them

both " existents." It is true that we may talk of two objects as " the same " in size or colour. But what we really mean is, not that the *objects* are the same, but only the abstract qualities ; and we recognize that the moment these qualities are embodied, they constitute two things, not one.

Now, of course, a logical theory of reality has logically no place for existence, except as it can reduce existence, as a brute fact, to its *own definition*. Thus I might discover that, to exist, a thing must occupy a specific location in time and space ; but if so, I should not get rid of the real existence, except verbally, by defining it as a spatio-temporal relation. Imaginary objects also have spatio-temporal qualities ; and if I have to say that in order to exist an object must be located in *real* time and space, the word " real " has already carried me beyond logic. Of course the fact that I can only define things in abstract terms no more makes them abstract terms themselves, than the fact that I can speak of them only in words makes them words. The whole issue is between the possibility of reducing the universe to terms of logical description, and the contention that there is something also in the nature of " stuff," which, even though it may be describable, is not reducible to description ; and the ability to describe it cannot therefore be taken to settle this issue. It can only be settled by an appeal to experience that goes deeper than our descriptive categories. Now to me it seems quite clear that existence does stand for something more ultimate than logic. For the neo-realist, on the contrary, reality, as existence, has pretty much gone by the board ; Professor Holt, in particular, does not hesitate to advertise his lack of serious interest in the notion, and seldom uses the word " real " without quotation marks to indicate his condescension to the vulgar prejudice.

Under these circumstances, then, it is not strange that the neo-realist should attempt to make his point by interpreting the situation in a way that ignores the notion of existence ; what is perhaps a little surprising is that he should suppose

that thereby he is silencing his critic. "When," Professor Holt writes, "the realist says that as things are perceived *so they are*, the idealist stupidly misunderstands him to say 'as things are perceived *so they are really*'—*i.e.* all perceived things are real things. But while all perceived things are things, *not* all perceived things are *real* things."[1] The critic, in other words, stupidly supposes that when the neo-realist professes to answer an objection brought against him, he really is intending to answer this objection, and not to wave it aside. Without pretending to speak for the idealist, the advocate of common sense has said, Here is a real existing object on the one hand, and on the other a real man with a real idea in his head that it is black, whereas it turns out that really the object is white. How can it be a black existence and a white existence at the same time? and if it is not really black, and yet the blackness was *somehow* present in order to be thought or judged, must it not have had some embodiment on a different plane independent of the object? Well, says Professor Holt, of course I don't mean that there is really a black existence. I don't take any interest in existence personally. I mean that when I perceive black, or when I think it, or when I perceive or think anything whatsoever, the object of my thought has its "objective" qualities—is describable, that is, in terms of extension, location in space, colour, and the like; in short, that "everything that is, is, and is as it is." Even the imagined black object is objective; it is not something unreal or subjective, in the sense that it is not the imagination *of an object*. Just forget the superstition about existence, and see how nicely your difficulties will then disappear.[2] Now, I am perfectly ready to follow Professor Holt's analysis as far as it goes. It is an approximately correct account of

[1] *New Realism*, p. 358.

[2] Professor Holt appears even to think that it is rather unsportsmanlike of the critic that he will not be content to abjure his own philosophical convictions when he deals with neo-realistic claims (p. 304), though why an opponent should be expected to concede the case beforehand is not made clear.

what the critical realist intends to refer to under the head of essences, or human meanings. But for him the problem of knowledge consists, not merely in the presence of these meanings or data, however " objective " you make them, but in their reference to the actual object; and the object is a case of existence or nothing.

It is apparent, even from this brief survey, that from the neo-realist's treatment of illusion one will get little light on the nature of error. The net outcome seems indeed to be that we are wrong in supposing that illusion is illusory; it is as good a fact as anything else. The real interest here lies in an entirely different direction; what the neo-realist is concerned with is to show that from illusion we can get no evidence for a " subjective " or " mental " fact. But in doing this we seem only to have emphasized the original difficulty; how, if all possible aspects or appearances of things are equally real, are we to account for the difference we certainly do make between truth and error? From here on, each neo-realist follows his own path, and it will be necessary to supply individual treatment.

3. First, however, it will be well to state more explicitly the general point of criticism which has already been involved, and which I take to represent the original and fundamental vice of the neo-realist position. About the nature of the difficulty which error presents there is pretty general agreement; I will take Professor Perry's formulation. " Truth and error," he writes, " both involve an objective. . . . Moreover, the presence of this objective factor in error would seem to belie its supposed erroneousness. . . . In order even to believe erroneously I must believe something. There must be the something for me to believe. That which I believe is what I believe it to be. Then how am I in error? "[1] Now I hesitate to speak disrespectfully of a difficulty which has appealed to such a number of acute minds; but, frankly, I find it hard to take this very seriously. To be sure, it con-

[1] *Journal of Philosophy*, vol. xiii, p. 569.

stitutes a genuine difficulty *if* the neo-realists' philosophy is correct; and I am going on to ask whether on their own assumptions they have really found a way out. But if, as is apparently the case, the sort of consideration quoted above is supposed to apply to the error situation in its common-sense interpretation, then I entirely refuse to be impressed by the dialectic. It seems to me to bear a suspicious resemblance to the puzzles so astutely set forth by Euthydemus, and to be resolved as soon as we make a single easy distinction. The distinction is that between the something, as an existent, *about* which I have a belief, and the something, as an intellectual content or meaning or essence, *which* I believe about it. This distinction granted, where lies the contradiction? Error does not consist in having a meaning before the mind, something *which* we believe, but in wrongly supposing that this characterizes a real object. The *what* of the belief, which alone is immediately present in experience, is the same whatever the belief's validity; but when it actually has the independent existence we assign to it the belief is true, and when it does not we have falsehood. Accordingly what I shall go on to ask is this. The neo-realist has a difficulty to dispose of which he admits is real. The simple and obvious way of meeting it is denied him; what alternative has he to propose that will save the doctrine of identity, while still recognizing the fact of error?[1]

4. I turn first to Professor Alexander's answer, as perhaps less esoteric than the rest. According to this, error consists in wrongly combining the elements of reality, owing to the "eccentricity" of the subject. Everything which is illusory in the illusion does actually exist in correspondence with the

[1] Mr. Joachim, for the idealists, finds essentially the same difficulty in the notion of error; error is "thinking the thing which is not," but the thing which is not is yet real. Or, from a different angle, "To think of nothing looks uncomfortably like thinking nothing, *i.e.* not thinking" (p. 127). The purely verbal character of the difficulty is apparent when we note that the first phrase means "having an idea in mind to which no independent existent corresponds," and the second, "having no idea in mind."

mental activity through which it is revealed ; but the personal character of the activity dislocates the real object from its place in things, and refers it to a context to which it does not belong. So when I fancy a horse's body, and complete it with a man's head, the head exists in reality, but not upon a horse's body.[1]

Now this sounds plausible up to a point ; but I cannot convince myself that it fits into Mr. Alexander's presuppositions. When he speaks of the man's head as real, the primary meaning is simply that it is describable as an object, and not as something " subjective " ; as he remarks, " physical is what has physical properties." [2] In other words, when we see, or think of, or imagine, or remember a physical object, it is actually this physical thing that we intend, and its character reduces in every case to the same objective terms. Mr. Alexander does not mean that every object need have as such a place in the physical world of science, except in the sense that it is constructed out of elements which must at some time and place have attached to the actual world. But now when we go on to talk of verifying our combinations " in experience," of some of the combinations " having actual existence," whereas others which are believed to have this do not, of our mind " working so as to be in the presence of objects in the order and arrangement in which they exist," [3] existence apparently means something more than the mere possession, by an object of awareness, of the qualities through which we describe the physical. If we were to take it in this last sense, the centaur would be as real as the horse or elephant. And, indeed, on Mr. Alexander's showing, what reason is there for supposing that combinations are *not* as " existent " as the elements themselves ? How can there be any illusory difference of " order," even, in a world that is perfectly single and self-identical ? Mr. Alexander's own answer is that we are

[1] *Proc. Aristotel. Soc.*, vol. x, p. 24.

[2] *Ibid.*, p. 16. The expression is perhaps a little ambiguous. It means descriptive properties merely, not active ones, *i.e.* capacities for producing physical effects.

[3] *Ibid.*, pp. 25, 27.

not forced to believe all combinations real, because we know that it is possible to reassort elements; we have evidence that we do physically handle things and recombine them into fresh wholes.[1] But if the analogy is to be pressed, it only emphasizes the difficulty. When our hands remove a flower from a stalk and put it in a vase, the result is as much a part of existence as was the original flower on the bush; and if "mental activity" is dealing with just the same realities as the hands were, why should we suppose its combinations of a different sort? Mr. Alexander says indeed that "instead of acting on the world, we so act upon ourselves as to place ourselves where we see things in an order and combination different in the case of illusion from the actual"; [2] but I cannot get the faintest notion what he means by this. If I create an imaginary object out of parts brought from widely separate localities, is the mind thereupon split up and scattered through the world from China to Peru? To be sure, this function of "awareness" is so mysterious at best that we ought not to balk perhaps at one mystery more; but at least it is fair to ask for some hint of the mechanism employed, since we are not allowed to appeal to the familiar mechanism of "ideas." Once again, then, if there is a real order of experience necessary to explain error, how are we to avoid the conclusion that its "existence" means something other than existence when defined so as to include errors quite as easily as truths? But if we admit a difference between the existence of the real object, and the reality of objective characters as merely objects of awareness, we have just the situation which the neo-realist is determined to deny.

Elsewhere Mr. Alexander suggests another rendering of the facts, which might seem at first to relieve the situation. This is in terms of the theory that the "real," which he now definitely distinguishes from the "objective," is the outcome of social intercourse.[3] From this standpoint a first corollary

[1] *Proc. Aristotel. Soc.*, vol. x, p. 26. [2] *Ibid.*, p. 27.
[3] *Mind* (N.S.), vol. xxii, pp. 16 f.

might be that the "real order," which furnishes our standard, is constituted by those objects which are capable of being repeated in the experiences of a number of men, in distinction from the private objects open only to the individual; an error, on the other hand, being definable as "something believed by one which is disbelieved by the collective." [1] This is, of course, a possible, though not to my mind a convincing, hypothesis. But at least it is one that other types of philosophy have a more obvious right to resort to than has Mr. Alexander. For it is the very point of his own "realism" that the entire being of the object is given directly to the awareness of the *individual*; and it is not obvious, therefore, what is added to it, in the way of actuality, by the agreement of others, apart from the fact that it furnishes common topics of conversation. But the real world is not primarily a world to talk about, it is a world to live and act in. The fact that other people have the same physical objects as himself is indeed a sign to the ordinary man that he is in the presence of something real, just as the lack of agreement is a sign of individual "eccentricity." But this is not because agreement makes a thing actual; rather, its actuality is the source and explanation of the agreement. And apart from such a reality which the social nature of experience already presupposes, there would not be the least ground for understanding why a private object should not meet the needs of the physical life, at any rate, as satisfactorily as a public one. In close connection with this, a related but quite distinguishable interpretation is given to truth, or reality, by identifying it with the synthesis of aspects which make up a total "object," [2] while error might now be made to consist in ignoring this variety of points of view, and in taking a single one as exclusively real. Error from this standpoint is just incompleteness in our knowledge, and nothing beside; and we might appear to be pointed to the idealist's doctrine of the Absolute, and of knowledge as coherence, as indeed is suggested by various things in Mr. Alexander's article. But while this

[1] *Mind* (N.S.), vol. xxii, pp. 23, 36. [2] *Ibid.*, p. 22.

also is in itself intelligible—though hardly in point of fact descriptive of more than a small proportion of the errors men commit—it is not clear to me just how it would connect with the limitation of the " complete revelation of a thing " to a group of " communicable " objects simply.[1] Why should not an appearance open to just one individual equally have its place in the total synthesis ? or why, indeed, should it be placed at any disadvantage ? I should, no doubt, be wrong if I thought that my neighbour, whose vision is normal, will get the same colour quality that I do who am colour-blind ; but no more wrong than he would be if he were to expect my experience to be his. The trouble is with the lack of catholicity, and not with the " incommunicable " character of my object. He will doubtless find more people to agree with him ; but if this encourages him to ignore the less popular point of view in the interests of easy intercommunication, it will only mean a greater temptation to error. There appears no reason, once more, why it should be merely " communicable " objects that are woven into the complete revelation of the thing, *unless* the fact that they can be verified by others presupposes some more ultimate advantage possessed by them for which the theory has no obvious grounding. Apart from this, reality as social agreement becomes a pure convention, powerless to throw any light upon that compulsory " order of nature " from which the problem started.

From these various worries critical realism is free. It can agree that our ideas are thoroughly objective ; they are, even in imagination, ideas of " objects," and not of mental states. When I think a centaur, I am ideally repeating that act of outward reference through which in perception I embody an essence in a real object, and which, through our dependence on perception, has become the mould in which all our " thoughts " are cast. But since for critical realism the given or present fact is not the object itself, but only its essence, and an actual realm of existence lies beyond, the critical

[1] *Mind* (N.S.), vol. xxii, p. 24.

realist *has* a way of distinguishing the real order from the mind-made one. His tentative placing of the qualities of a centaur—or, for that matter, of a horse—in the real world does not actually put them there, because the real world is distinct from any idea of his ; and if he goes on to *accept* its location there, in the way not now of imagination or supposal, but of *belief*, it still is open for his belief to be either true or false, as the facts may dictate. And similarly he can *recombine* the qualities which he refers to existence, without affecting in the least existence itself.

5. I turn next to Mr. Russell. Mr. Russell also starts with the dialectic popular with his school. It is impossible, he thinks, to regard belief as the relation of the mind to a single object, which could be said to " be what is believed," as this would exclude error. Othello believes falsely that Desdemona loves Cassio. We cannot say that this belief consists in the relation to a single object " Desdemona's love of Cassio," for if there were such an object the belief would be true. There is, in fact, no such object, and therefore Othello cannot have any relation to such an object. We escape the difficulty by supposing belief to consist in a relation between several terms, not between two. Thus the actual occurrence, at the moment when Othello is entertaining his belief, is that the relation called " believing " is knitting together into one complex whole the four terms Othello, Desdemona, loving, and Cassio. What is called belief or judgment is nothing but this relation of believing, or judging, which relates a mind to several things other than itself. And the belief is true if there is another complex unity, Desdemona's love for Cassio, which is composed exclusively of the *objects* of the belief—and so excluding Othello, or the " mind "—with the relation which was one of the objects (loving, namely) occurring now as the cement which binds the other objects together ; otherwise the belief is false.[1]

There are various queries which arise about the details of

[1] *Problems of Philosophy*, pp. 193-200.

this rather complicated construction ; but, first, it will be well to scrutinize again the case against the much simpler statement which is rejected. A false belief, Mr. Russell says, cannot consist in a relation to a single object, for if there were such an object the belief would be true. The difficulty here seems once more to be occasioned by a lack of precision in the statement. The theory I am defending would, to begin with, hardly speak of a false belief as a " relation of the mind to an object." Belief involves, indeed, what is believed to be a relation of an ideal content to a (supposed) real ; but it is only verbally that this suggests the implication that because we have, in stating it, to *talk* about an object in terms that imply reals, the object therefore really *is*. Error is precisely an assertion of the embodiment of an essence when, so far as the error goes, there is *not* any object thus characterized. And this is made possible by the fact that there are in the knowledge-situation not two factors, but three—mind, logical essence, and real object ; the cognitive recognition of the object being, not the bare essence, but the combination of this with a further " affirmation," or act of reference to an independent real—an act which may or may not be justified. What Mr. Russell calls the object is thus, for the critical realist, not the object at all, but merely the logical essence apprehended by the mind. And it is not this, of course, that is false ; it is always just what it is. Furthermore, it is the unified content " Desdemona's love for Cassio " ; and surely Mr. Russell is completely transforming the fact when he maintains that the belief-content is not this, but a mere litter of separate terms. And, finally, the critical realist objects to Mr. Russell's reading of the situation in that he refuses to allow that Othello, or the " mind," enters into the *belief* as such at all ; the mind is not in any sense referred to as a part of the judgment, though it may of course be involved in an understanding of the full conditions of the judgment. The only sense in which the " mind " (not " Othello," however) is actually present in the judgment is as the —in a carefully

guarded sense—" mental " content of belief itself—Desdemona's love of Cassio. And error, again, is explained by the supposition that it is possible that a certain kind of object, though it may be believed in, does *not* exist, although the " kind " has to be before the mind as a meaning.

I fail to see why such a statement does not relieve the situation of paradox. But if it still is not convincing, I may add that at any rate Mr. Russell's hypothesis is not free from difficulty. I am inclined at the start to stumble at the doctrine of belief. I can see, I think, why Mr. Russell should wish to describe " knowledge of acquaintance " as a relation between the mind and the object (content), though on his own showing both the relationship and the mental term are of a very peculiar nature indeed. But belief is not this " awareness " relation merely. Is it this plus an " order " imparted to the content ? In the first place, I fail to see how " awareness " has this causal efficacy, or what other efficacy is provided. And even were it so, how then does belief differ from mere supposal, where the same order would seem to be present ? It is perfectly true—and this, I suppose, is really at the bottom of Mr. Russell's contention—that in the case of any belief I—the knower—am apprehending a certain objective content which thus is in relation to me, and which may or may not actually describe an existent outside of this relation ; but to turn this factual statement, itself badly in need of further interpretation, directly into a sufficient analysis of the knowledge-situation, seems to me to leave much to be desired. It does not greatly illuminate belief to call it the relation of what is believed to a believer ; while the " objects " of the belief, unless they are frankly recognized as conceptual facts—" ideas " or " essences "—not at all to be identified with the supposed reality which is the true object to which the belief refers, lend themselves to no interpretation which I have found myself able to follow through.

From the other side, again, I should like to see more

clearly the reason for the peculiar rôle which the theory assigns to the " order " relationship. Mr. Russell, if I understand him, is compelled to make the object multiple, because each constituent singly must by definition, in accordance with his theory of knowledge, be accepted as objective or real, the only chance for error lying therefore in the order of their combination. But just why should this last be excluded from the make-up of the object ? If the order is not a real " objective " datum, it cannot belong, either, to the actual situation that is presupposed when the judgment is true ; if it *is* a real datum, then why should it not stand on the same plane with Cassio or loving ? What is the ground for the claim that the order relationship should in judgment be taken out of the object or content, and renamed belief ? And if this particular form of content can be present somehow in a way compatible with error, why may not the same be true as well of the other constituents ? But then the substitution of a complex for a single object has served no useful purpose. Every belief can be admitted to be what it claims to be—a belief about a whole ; and any discrepancy between the content of a belief and the existent fact, which constitutes an error, will be a failure in correspondence on some specific point of *content,* and never a creation of the believing act as an addition in the nature of " cement." Belief supplies the content of order only in the sense in which it supplies all the rest of the content—as this is represented in the belief by an ideal essence.

6. Among American realists, Professor Holt has perhaps had as much to say as any one about the notion of error. It is true that in dealing with illusions he seems chiefly concerned with explaining error away. And this is not surprising. Strictly, in a philosophy that reduces itself to a speculative reconstruction of the world of physical science, no room for error exists ; if no " subjective " fact supervenes to mar the purity of our logically complete system, if the human is no more than a certain particular group of actions,

called behaviour, in a scientific context, the word is apparently left no place in our vocabulary.

From this conclusion there is one way of escape—if we can enlarge the meaning of error so that it may represent no peculiarity of the mental world of "knowledge," but may find a place in the ultimate universe itself. Professor Holt has accordingly to show the objectivity of error. As a first step to this, some reinterpretation of the concept is required; and the direction in which this will point us is not hard to anticipate. For a logical theory of reality, error will mean presumably contradiction, or contrariety.[1] Let us then assume that our real problem is the problem of contradiction. Now, contradiction is always an affair of propositions, not of terms. Then, since it is undoubted that there are such things as contradictory propositions, we are able to provide a positive theory of error which does justice to its actuality, without being committed to undesirable doctrines about the subjective or the mental. The considerations which Professor Holt adduces do not, he writes, "purport to explain 'error' (contradiction) *away*; and they do show that the problem of contradiction (error) has nothing whatsoever to do with the problem of knowledge or epistemology."[2] We may, to be sure, still continue to talk of error only in connection with knowledge, because by definition we call no contradiction an "error" unless it exists within the field of some person's consciousness. But this is a verbal matter simply; the real problem can be dealt with quite independently of knowledge, since contradiction is to be found, as well, not only in the neutral realm of logic, but also, as Professor Holt maintains, in the physical world of science.

It is perhaps evident that the sufficiency of Professor Holt's solution depends a good deal upon one's willingness to accept his reduction of the universe to a neutral realm of "being," made up of terms and propositions; and about this, as metaphysics, I need not add anything to what has already

[1] *New Realism*, p. 361. [2] *Ibid.*, p. 63.

been said. In the remarks I have to make I shall limit myself to a less ultimate range of considerations. And it may be granted to begin with that, as mere logic, apart from metaphysical implications, there seems little to object to in Professor Holt's doctrine. It is so, that contradiction only exists between propositions. It is so, that contradictory propositions subsist, or have definite meaning, quite apart from whether or not they can ever "generate or be realized in a system of terms in relation." But what I still fail to see clearly is the relevancy of this to the vulgar fact of human error; it rests entirely on the identification of error with contradiction, and Professor Holt's transition from one of these terms to the other is much too easily accomplished to suit me.

And, first, I may call attention to a difficulty in equating the terms error and contradiction, even if one could adopt Professor Holt's philosophy of the knowledge-process. According to this, consciousness, or knowledge, is a cross-section of the universe to which the organism is at the moment responding, and error is no more than the presence, within this field, of propositions which cannot be realized in a system of terms, and which equally constitute error—apart from a verbal convention—in the neutral realm of being, independent of the organism. The mere *presence* of such propositions is all apparently that is called for; any added character peculiar to their *mental* presence is excluded by the explicit denial that error is in any sense specifically mental. Now, so far as I can understand this, it seems to leave no place for one highly important feature among the empirical differentiae of error—namely, *belief*. It apparently is enough that two contradictory propositions should be *entertained* by the mind; indeed, it is hard to see what more than their mere presence is allowable, unless we are to make "mental" contradiction essentially distinct from contradiction in the large, and so be forced to re-define both error and consciousness. But it is certain that by no natural use of language can I be said to be in error whenever I hold two contradictory propositions before the

mind, or when I perceive any of those innumerable events in nature which, according to Professor Holt, are cases of objective contradiction.[1]

And, as the definition covers many things which are errors only in a non-natural sense, so also I cannot convince myself that every case of error is a case of contradiction. Take the simplest kind of error—an error of fact. I judge that an apple is ripe, and it turns out to be still green and sour; by what device can I translate plausibly the description of this as a discrepancy between belief and reality, into a case of asserting and denying the same proposition? I have too much respect for the ingenuity of our modern philosophers to deny that it might be done, and probably in a number of ways; but I can think of none that carries conviction to my own mind. The simplest device would be to say that belief is accepted naïvely and without question until doubt is thrown upon it by some contrary belief, and that, therefore, error is produced by the clash of contradictions. Thus my belief that an object is round becomes an error only as some one else, or myself at a later date, is able to show that, on the contrary, it is some shape other than round. But to this there is a two-fold reply. In the first place, we need to call attention once more to the ambiguity in the expression "becomes an error." If we mean "is recognized as an error," then it is quite possibly true that we become conscious that a belief is, or may be, erroneous only under the stimulus of some opposing proposition, believed, or hypothetically entertained. But it is surely the dictum of common sense, to be followed until reason is shown to the contrary, that for a thing to be known to be an error does not first make it erroneous, as if it were enough to keep our eyes shut to further evidence to be always in the right. But if it must have been false even before it was so consciously, it is clear that we are not *defining* error in terms of contradiction. I say that a thing is square, you say that it is round; that is, indeed, reason for supposing that one of

[1] Cf. McGilvary, *Journal of Philosophy*, vol. xv, p. 267.

us is mistaken. But it is the *indication* of an error; it does not *constitute* the error. If it did, we should both equally be wrong, since the relation of each proposition to the fact of contradiction is the same; whereas it is perfectly possible that one of us is right. And, in such a case, the other was in error even before the conscious contradiction developed. There is indeed a discrepancy present, but it is a discrepancy, not between the two judgments, but between one of the judgments and the facts; and here we have left the purely logical field. And even where a contradiction between propositions is a more significant thing, in most instances this still functions not as constituting the nature of the error, but as a sign or ground that a "reasoning process" has gone astray. It may be that there is one special instance in which it can be said that an error is actually constituted by the fact of contradiction—when a man consciously tries to combine in a single object of belief two contradictory propositions. If I attempt to maintain the possibility of such a thing as a round square, this might be classed as erroneous merely on the ground that it does involve assertion and denial in the same breath. But such an identification of error with the assertion of unthinkables would really amount, I should suppose, to a denial that error exists; for error is inconceivable without belief, and whether any one ever really believed in the existence of what he recognized as meaningless objects I should regard as doubtful. When I find myself committed to strictly inconsistent propositions about a thing, I do not try to accept them both; I simply take it as a sign that one of them at least is mistaken, though which it is that is in error, and what I mean by its being in error, I have to settle by appealing to something other than the fact of contradiction.

7. Something like the identification of error with unthinkables would seem to be the doctrine of another recent writer who has a good deal here in common with the neo-realistic school. I refer to a brilliant but somewhat perverse article

by Professor Sheldon.[1] Professor Sheldon's thesis is that everything that is thinkable is equally real, the only unreality being that which cannot even be thought. The outcome is that the attribution of no quality whatsoever constitutes by itself an error. If I see a tortoise on my table where other men see only a book or empty space, the tortoise is just as real as the book ; and as contradiction does not exist between terms, there is nothing to prevent our holding as equally true that a book is there, and a tortoise, and, indeed, anything else that can enter into the mind of man. Error can only consist, not in the attribution of thinkables, but in the violation of the true law of contradiction, which tells me that I cannot both assert and deny the same proposition. He only is in error accordingly who claims, not that the thing he sees or imagines is real, but that there is anything else that is not real ; for this last would be to deny what, by the very fact of being able to bring it before the mind, is asserted. Thus we escape error by allowing that every possible proposition that any one can assert about anything is true, except the proposition that some of them are not true.

8. In Professor Perry's treatment of error I find greater pertinency to the practical issue. A good share of his analysis I should have no particular difficulty in adopting ; and, indeed, the definition of truth and error as the use or misuse of a " law applied or referred to a thing by an act of mind," [2] might rather easily be taken by the critical realist as meaning much what he himself is trying to maintain. But while the words might suggest to an inadvertent reader that the " idea " attributed to an independent reality has come back again, the interpretation is at hand to remove the sting, and free this " law " (just why the word is chosen is not yet wholly clear to me) from all the vicious implications of the " mental," even though it be utilized by an " act of mind." Assume a thorough-going behaviourism, and all is easy. The " idea "

[1] *Philos. Rev.*, vol. xxv, p. 335.
[2] *Journ. of Philos.*, vol. xiii, p. 567.

which I convey to you is the articulatory process, the word, which has through association and convention acquired the power to call attention to something, or prepare attention for something; your state of understanding is the set of the attentive mechanism. Belief is this plus a determinate motor set. The "objective" is the adverbial qualification of my act of believing, or set, the *way* I believe; it is the specific *manner* in which I am adjusted expectantly to the environment. Thus the "state of mind" in the characterization which, rightly or wrongly, is assigned to the weather when we judge rain, is the act of looking toward the sky with your hand on your umbrella.[1] When, accordingly, Professor Perry says that in order to believe "that it is raining to-day" there must be to-day and raining, but it is not necessary that raining should be true of to-day,[2] what he means is to the effect that I may carry an umbrella whether or not rain actually falls; that if it does fall we have truth, otherwise error; and that the "law," accordingly, which I may thus erroneously attribute to the real environment, is an incipient kind of act referred to —that is, set in functional relation to—an environment external to the organism, and appearing in the more intellectual and less overt forms of judgment as a word or act of speaking.

To deal at all adequately with the claim of behaviourism to be an ultimate philosophy is out of the question in the space at my disposal; I can only suggest briefly the general nature of the considerations which seem to me pertinent. The simplest line of attack—and I confess I regard it as conclusive—will be to deny that any conceivable form of physical response is descriptively identical with what we all mean by the fact of knowing. I find it still in order to appeal to experience to establish the conviction that a behaviouristic universe totally fails to contain a number of things I feel certain are actually in the world, and on which the whole dispute turns. When I examine what I mean by "thinking

[1] *Journ. of Philos.*, vol. xiii, pp. 562, 564, 568, 570.
[2] *Ibid.*, p. 572.

about rain," I am assured in my own mind that I find more there than a motor attitude set *as if* it anticipated rain. I find, or may find, the rain itself really anticipated in its own proper characteristics by my present knowing experience, and represented therefore by a present fact, other than physical adjustment, which I have to go far out of my way to avoid calling by its natural name—a mental idea of a future physical event. It is probably true that by an observer my act could be defined as a function of some specific external situation; and I should even be ready to allow that the field of objects which enter into this situation has roughly the same extension as that of which in cognition I am aware or conscious. But I cannot for a moment grant that what I mean by "knowing" these objects is reducible to a series of muscular changes—a sort of fact which I also can know, and know in wholly different terms; nor that the presence of the objects for knowledge is the same, in whole or in part, as their extra-bodily existence. Consider in particular the knowing of a *future* fact. Plainly this future fact is not *now* existent; and yet it *operates* now in some form of present awareness quite distinguishable from the part it plays for an observer who waits to see it turn up as the *de facto* end in which the action terminates. Doubtless there is in my present nervous structure some twist which bears a causal relationship to a specific future outcome; but to look for the experienced character of cognition in physiological nerve-processes is to revive the crudest traditions of materialism.

The truth of the matter seems to me to be that neo-realism here is trying to combine two motives which I strongly suspect are incompatible. It wants to maintain the dogma of the unmediated presence in experience of reality in all its experienced characters; and it wants also, and desperately, to be "scientific," and enjoy the prestige of science. The first aim English neo-realism is fairly successful in attaining; its doctrine of "awareness" as a mystical psychic process, which by the fact of its "compresence" may have an entity of

any sort as its direct object, is adapted to perform this service, whatever our judgment about its other qualifications. But the American realists repudiate awareness, and try to win a more orthodox scientific standing by turning the " content of consciousness " into that section of the scientific universe to which a bodily organism is responding. But to do this they ought—or so at least it seems to me—to recognize that they have lost the right to the particular advantages which realism started out by claiming. You cannot play fast and loose with science ; if you want its benefits you must accept its authority and its limitations. And the world of science is distinctly not the world of immediate perception. Behaviourism apparently accepts this necessity when it covers itself with the mantle of scientific respectability by reducing the inner life to physical data and physical movements. But by the same act it ceases to leave a place in the universe for those particular qualities of existence which science rejects from its world picture, and which traditionally have been located in the psychical ; and so it lays itself open to the unanswerable criticism which " materialism " has always invited.

9. Professor Montague's treatment of error is so bound up with his peculiar theory of consciousness, that to estimate it requires first a critical consideration of this latter concept. The first and most pervasive difficulty I feel here has to do with a point of methodology. Put briefly, the theory reduces to the identification of consciousness, or cognition, with causality —a result which is accomplished by pointing out various more or less close analogies between the two. Now, I should see my way here if Professor Montague's meaning were, unambiguously, either that the true nature of consciousness is to be found in what we ordinarily know as causal implication, or that the true nature of causality is identifiable with what we are directly acquainted with as knowledge. But I am somewhat at a loss when *each* is used to throw light on the *other*. Supposedly there is a natural sense attaching to both the terms causation and knowledge, and a sense different in the

two cases, or we should not imagine that either could be of use for purposes of interpretation. And of this difference of specific connotation Professor Montague makes use. But as he appeals to each in turn, the issue is left uncertain. If we are right, he remarks, in assuming potentiality as actually real in itself, then the only conceivable actuality of such potentiality is that of consciousness. And if we are right, he goes on, in holding that consciousness involves a reference to times and places other than those of the brain-processes which at any moment condition such consciousness, then the only conceivable nature of consciousness is that self-transcending implication of the events in a causal series which, viewed from without, we characterize as potentiality.[1] Such an attempt to supply the positive content of both concepts by an interchange of natures surely makes for confusion rather than a clear understanding. It is not impossible, as with certain of the English realists, to conceive of knowledge as a *qualitatively new aspect*, a *different* form of expression, of the same world that has hitherto revealed itself as physical and causal. But in that case we are not reducing knowledge to causality; we are pointing out *merely* an *analogy* between two co-ordinate aspects of the universe, each definable in terms of itself alone.

It is evident, however, that notwithstanding this formal difficulty, Professor Montague has a well-defined notion in his mind; and at the risk of misinterpreting him by simplifying a very intricate discussion, I may endeavour to set forth what my understanding of this is. When energy becomes potential, a state of affairs is brought about which we find it difficult to represent in idea. Motion has disappeared; and yet the possibility exists of its reappearance, and this possibility can be given definite quantitative expression. Is potentiality, then, nothing more actual than an abstract possibility of some future event?—this seems a hard saying. Now, in connection with the organism, there is another fact which has this same property of invisibility or inaccessibility to an outside observer,

[1] *Philos. Rev.*, vol. xxiii, p. 58.

and which, moreover, comes to light at the very point where kinetic passes into potential energy, and is redirected—the fact of sensation. Let us assume, therefore, that the two facts are identical, and that the positive reality of this potential energy is what from the inside I know as sensation.[1]

At this point it may be well to stop for a moment to raise a question of interpretation. Does the hypothesis mean that reality at certain stages in the physical process changes its essential nature, and becomes for the moment psychical? Apparently not, for Professor Montague vigorously repudiates any dualism of existence. Then it would seem that qualitatively the entire process must be continuous. Now, if this is so, an interpretation is at hand for which a considerable amount of evidence might be found in his pages.

"Potentiality is of such a nature that it can be thought of intrinsically or for itself only as consciousness, and consciousness is of such a nature that it can be thought of extrinsically or for an external observer only as potentiality"[2]—this suggests quite definitely the orthodox panpsychist creed that the "inner" reality of what the observer views phenomenally as a state of energy is actually a conscious fact, and that, accordingly, the entire process would reveal itself as psychical if we could get at its reality from the inside. And we find Professor Montague holding indeed that secondary qualities—commonly regarded as sensations—do actually exist in the physical world.[3] This interpretation is of course the one that would fall in with the reduction of causality to consciousness which constitutes one half of the thesis from which we started. However, the doctrine of panpsychism Professor Montague also definitely rejects. Moreover it would not, even if accepted, in so far help us out in our main problem. The mere existence of qualitative sensations does not explain *knowledge*, or the

[1] *Journ. of Philos.*, vol. iv, pp. 379-382; *Essays in Honor of William James*, pp. 126 ff.

[2] *Philos. Rev.*, vol. xxiii, p. 58. Cf. *New Realism*, p. 279.

[3] *Essays in Honor of William James*, p. 130 f.

self-transcendence which carries us to objects in other times and places ; and it is this relationship, and not psychic existence, in which he is really interested in the identification of consciousness and causality. Altogether, then, we seem only to be confusing the situation if we call the inner reality of potential energy sensation. I might add that if the same or similar qualities are present alike in the kinetic process and its potential equivalent, the reason seems obscure for holding that in the latter case they suddenly disappear from the view of the external observer and reappear as sensations accessible only from the inside ; to say nothing of the fact that if consciousness is sensation, or a psychic state, we are in conflict with Professor Montague's theory that consciousness is a relation.

To get the significance of the second meaning of consciousness as a self-transcending relation, we need to turn from panpsychism, and envisage the process now in physical terms. We start from the causal nexus of energies which science reveals, while premising also that along with these go qualitative differences, actually belonging to reality, though not scientifically useful in accounting for events. Now, the nervous system is a device by which energy-patterns in the surrounding world can be transmitted to the brain, and stored there in potential form. Such potentialities, however, are not to be regarded simply as facts with a particular spatial and temporal locus. The essence of potentiality is that there is somehow present to it its causal implicate ; otherwise it is a mere methodological fiction. In conscious terms, these cerebral energy-forms are our memories. And here comes in the possibility of error. A given stored energy-pattern implies, not necessarily its actual cause, but its *simplest* cause ; it implies, namely, a cause for itself of an identical quality, since every form of energy tends, if nothing interferes, to propagate its own pattern. But since this absence of interference need not hold, and since there are a variety of ways in which the same effect might have been produced, the implicate may not be justified. When, accordingly, the self-transcending implicate

of a brain-event happens to have been the actual antecedent, then the object perceived exists, and we have truth. When there is an uncorrected distortion, due to the co-operative action of the medium or the organism, such that the simplest cause is not the existing one, then the implicate is not the real cause, and we have error.[1]

Now here it seems to me that it is necessary to begin to make certain distinctions, whose issue is such as to cast grave doubt on the supposition that we have advanced at all in our understanding of the fact of knowledge. It is true, in the first place, that an effect implies its cause, and a cause its effect, as a matter of *logical conception*. It *may* also be true that potential energy, as a fact in the physical world, has, as a part of its being, an implication of the effect it tends to bring about. But the problem is to show how this presence of another existence, in the face of its spatial and temporal absence, is to be made intelligible ; and it is to this end that we appeal to knowledge. For in knowledge there is somehow just this fact of presence-in-absence. But when we take causality, not as a mere logical concept, but as a tool for scientific explanation, the analogy breaks down in an essential point ; the implication works in the wrong direction. Knowledge may be in a certain sense a "re-projection" of objects into the outer world ; but not in the only sense that is open to this phrase if we stick to the physical and biological concepts we have been employing. As physical, potential energy works forward, and never backward. And, accordingly, if re-projection has really a scientific meaning, we must suppose that the energy-patterns in the brain tend to project themselves causally into the outer world, and create copies of themselves there, as they in turn are copies of previous causes ; or perhaps, as a variant, that the perceptual activity helps to modify the original object by way of qualities which it itself contributes.[2] On the whole, the plausibility of such a doctrine,

[1] *Philos. Rev.*, vol. xxiii, pp. 57, 59, 63 ; *New Realism*, pp. 286 ff.
[2] *Journ. of Philos.*, vol. iv, pp. 381-383.

on any physiological basis known to us, seems to me almost nil. What brain-states do is to set up muscular changes whose outer effects are, for the most part, of a wholly different pattern; and a knowledge of the objective world is already presupposed before these effects can be aimed at. And, so long as this is so, the implication of an *effect* has no relevancy in explaining knowledge; and therewith the connection with causality as an effective scientific concept of explanation lapses.

We have, then, to fall back on the implication, not of an effect in its cause, but of a cause in its effect. And here there is a certain relevancy to the fact of knowledge; perceptual knowledge *is* usually regarded as an account of objects that have set up causal changes in the nervous system. But if we still attempt to render this implication, this presence-in-absence, intelligible, we find the possibilities greatly reduced. Causality as a concept of productive energy has been eliminated. The mere fact that the brain-state *has* been brought about by an actual physical cause is of course no explanation, nor does the *fact* of a difference of quality in the brain-state constitute an error. Knowing, again, as a distinctive form of experience merely, freed from its confusing identification with potential energy, has no specific content other than the familiar one which implies that the absent object is present in *idea*; and ideas are by the neo-realist abjured. Accordingly, the only thing that remains is the purely *logical* relation as such. In other words, instead of explaining causality by knowledge and knowledge by causality, both knowledge and causality alike are left with no terms to describe their essence, save that of the logical implication involved in the concept of cause and effect; and even then the implication in the two cases works in opposite directions. I cannot believe that, when this is once put before us in its nakedness, it will continue to carry conviction. What gives the theory all its plausibility is the ungrounded reference to real causality and real consciousness, consciousness supplying the notion of a world of objects ideally present to the knowing mind, and causality the attachment to

an actual world of physical processes. Formally Professor Montague succeeds in satisfying in part the demands which his theory has to meet by combining the two concepts of potentiality and implication, and then re-defining each to suit his purposes.[1] But when he tries to find a real fact of experience which embodies these logical requirements, I cannot see that he makes out his case at all.

10. In turning, finally, to the most recent attempt which neo-realism has made to describe error, I am disarmed by the fact that the definition is in my judgment substantially a correct one. For Professor Spaulding, error consists in wrongly regarding something as "existential" which is only "subsistential."[2] If at least subsistence is extended to cover any character or "fact" capable of being held before the mind, it is what the present volume calls an "essence"; and I have throughout been maintaining that error is the incorrect ascription of an essence to an existence. The only fault I have to find with Professor Spaulding is that he falls back too easily on the blessed word "subsistence," and does not sufficiently realize his responsibility for making really intelligible the situation he has—rightly, I believe—suggested. I do not myself think that he can possibly do this except by allowing to "existence," and also incidentally to the "psychical," a place in the universe which would compromise the true neo-realistic faith.

III.

PRAGMATISM

The criticism of neo-realism has been in general to the effect that the positive requirements of its thesis do not allow it to define error intelligibly, or to find a place for error in the universe. Pragmatism does not have this particular difficulty.

[1] *New Realism*, pp. 282-283.
[2] *The New Rationalism*, p. 295.

Once grant that truth can be defined in terms of successful adjustment, and when the adjustment fails we have error. To show that this is an unsatisfactory account would require, therefore, a full consideration of the truth or knowledge-situation as the pragmatist views it; and this I cannot undertake to give. I shall, therefore, only stop to point out briefly why I feel unable to take what he has to say as a solution of the problem.

The primary reason for my dissatisfaction turns upon an ambiguity which is particularly in evidence in Mr. Schiller's treatment of error.[1] If it were a matter of answering the question, not what is the nature of error? but what are the conditions involved in our conscious recognition of error? I should have no great difficulty in subscribing to most that Mr. Schiller has to say. Probably we do not suspect error save as consequences in some form fail to be satisfactory. But if this is taken to imply that error does not exist until some one becomes aware of it as error, it reverses what we all naturally believe; and no one would be likely to adopt such a thesis except as it was necessary in the interests of a metaphysical theory. The everyday problem of error, then, which presupposes that error is revealed, not created, by its consequences, the pragmatist cannot be said to have even considered, much less solved; he simply rules it out at the start as an illegitimate problem.

2. The general logic of this attitude, as it has significance for a theory of error, no one has dealt with so clear-sightedly as Professor Dewey. To escape the pitfalls of "epistemology" we have, he maintains, first of all to see that our whole trouble comes from the original blunder of taking perception as a case of knowledge. The percept, or the thing, is just a natural existence functioning in experience, with, in so far, absolutely no knowledge-status. It enters the sphere of knowledge, becomes a "conscious" fact, only as some hindrance to an effective adjustment induces a new experience wherein the

[1] *Proc. Aristotel. Soc.*, vol. xi, p. 144.

datum is now used in a particular way—to suggest, namely, a possible future event, and so to guide the course of action. And along this line Professor Dewey is able to impart meaning to a number of the considerations which we have seen the neo-realist using, but a meaning more definite and consistent; and thereby certain objections raised by the "subjectivistic" critic are—always provided that pragmatism is allowed to define the situation in its own way—at last satisfactorily disposed of. For there is now no question of a reference of varying and contradictory characters to *the same object*, in which they co-exist.[1] What we have is rather a continuous history or development of things, each stage equally real with any other, but each differing through the difference in the situation. The contrast between the everyday world and the world of science is not now a double way of looking at a single universe, one of which must therefore be illusory. It is simply that the cruder "things" of common experience are supplanted by a more highly refined and exactly analysed experience, the motive being the eminently practical one of making more precise and accurate the inferences to which the object lends itself.[2] And there is no ontological advantage which the primary qualities possess over the secondary; both are equally real in their appropriate context. So of the stock examples of illusion. The bent stick in the water is an experience, or a "thing," equally real with the straight; since there is no single real stick to which they belong as appearances, the bent stick can be said to give rise to error only in so far as it may suggest other and future experiences which fail to materialize.[3]

This is, as I have said, in the pragmatic context, a consistent enough view, and not, I think, open to the same objections that similar arguments call forth in the mouth of the neo-realist.

[1] *Essays in Experimental Logic*, p. 254.

[2] *Ibid.*, pp. 37, 409.

[3] *Ibid.*, pp. 12, 274, 397; *Creative Intelligence*, p. 39; *Influence of Darwin*, p. 235.

There is no way to meet it except by calling in question the presuppositions on which it rests. This task has already been undertaken by Professor Lovejoy, and I shall not pursue it further. Meanwhile it may be repeated that the quarrel between critical realist and pragmatist is due primarily to the fact that they are not dealing with the same problem. Professor Dewey's concern is with the technique of the actual advance of knowledge in the concrete—its linear dimension in relation to other knowledge past and future, as this enters into the texture of conduct. The critical realist, on the contrary, is interested in its dimension of depth—its ability to present to man's mind a faithful report of the true nature of the world in which he has to live and act. Unluckily Professor Dewey refuses outright to interest himself in this second problem, or to admit the significance of any aspects of experience that imply its legitimacy; and accordingly he is forced by his logic to a reinterpretation of reality which, as metaphysics, the realist finds it impossible to accept. Meanwhile the realist is able on his side to be more catholic, and to allow not only the validity of both problems, but the very considerable importance and originality of the pragmatist's contribution in its proper sphere.

THREE PROOFS OF REALISM

THREE PROOFS OF REALISM

By George Santayana

I

DEFINITION OF REALISM

Realism in regard to knowledge has various degrees. The minimum of realism is the presumption that there is such a thing as knowledge; in other words, that perception and thought refer to some object not the mere experience of perceiving and thinking. The maximum of realism would be the assurance that everything ever perceived or thought of existed apart from apprehension and exactly in the form in which it is believed to exist: in other words, that perception and conception are always direct and literal revelations, and that there is no such thing as error. If this is the range of realism, I think we may say that any reasonable theory of knowledge—any theory that does not abolish its own subject-matter—will occupy some point between these extremes, and will be more or less realistic.

The various degrees of realism, however, cannot be arranged in a single scale, for there are two distinct questions that may be answered more or less realistically: one, what measure of independence or separate existence shall be ascribed to the object? and the other, what degree of literalness and adequacy shall be claimed for knowledge? These two applications of realism by no means go hand in hand. The most decided realist in respect to the independence of objects may be a

sceptic in respect to the accuracy of his ideas. He may be a believer in the unknowable, like Kant: or he may be a materialist, who thinks that most of the notions entertained by the human mind are either illusions or conventional symbols. On the other hand, the most imperturbed realist in respect to the accuracy of his ideas, who is sure that things are just what they seem, may for that very reason be tempted to drop the other strand of realism and to maintain that his experiences and their objects are identical. Then the only difference between him and an idealist will concern the genesis and duration he attributes to those neutral or epicene "facts of experience" which they both recognize: the naïve realist will deploy these objects naturalistically, in their own medium of space and continuous evolution, whereas the idealist will admit that they exist only intermittently and in single file, as perceptions in some mind.

A critic might perhaps suggest that the two strains in realism are positively contradictory, since the tendency of the one is to oppose appearance to reality and the tendency of the other is to identify them. But this happens in very different senses. In the first place appearance is perfectly real in its own way. We may leave to one side for the moment the physical realities implied in appearance: the animal that must exist for things to appear to, and the things that by their impact appear to him, attract his attention, and are the objects which appearance reports and prompts him to investigate further; for although without the animal body appearance would lose its seat and its focus, and without an external object would lose its significance, yet these physical realities are not contained in appearance taken absolutely, as we may take it when, in its presence, we inhibit as much as possible all reaction and understanding. But even the passive and immediate data of appearance, its bare signals and language when stupidly gaped at, retain their aesthetic and logical character—the primary sort of reality or being. Moreover, the fact that any such data appear or are thought

of at all, however ideal and non-existent in themselves, is an historical event, with undeniable existence in the empirical sphere. It seems clear, therefore, that the special and invidious kind of reality opposed to appearance must mean an underlying reality, a *substance* : and it had better be called by that name.

In view of this complexity proper to appearance, of its own special kinds of reality, and of its various internal and external bonds with substance, the alleged contradiction between the two tendencies in realism is easily solved. For these two tendencies appear in the treatment of two different problems. One problem is whether substance and appearance are distinct in their existence and have different conditions ; to which the answer of the realist tends to be that their existence is quite distinct and their conditions entirely different. The other problem touches the degree of similarity between the immediate data or symbols of sense or thought and the intrinsic qualities of the substance which is its object : and here the tendency of the realist is to reply that the similarity is great, and may even rise to identity of essence.

Now there is obviously no contradiction in maintaining both that knowledge is something added to its subject-matter, previously unknown, and at the same time that this acquired knowledge describes that subject-matter correctly. Indeed, how could there be any description, correct or incorrect, if it were not in existence something new, and in deliverance and intent something relevant ? A portrait, to be a portrait, must be distinct from the sitter, and must at the same time somehow resemble or be referred to him ; the question how good a portrait it is, or what are the best methods of portraiture, would not otherwise arise. So knowledge could not be knowledge at all unless it was a fresh fact, not identical in existence with its object ; and it could not be true knowledge unless, in its deliverance, it specified some of the qualities or relations which really belong to that object. Even to fall into error and misconceive its object, the cognitive process must first

select that object unequivocally, by designating its real locus or some true circumstance that will suffice to identify it.

The two tendencies in realism are therefore perfectly consistent, and truly complementary : the one tends to separate appearance from substance only in existence ; the other tends to identify them only in essence. But neither the separation nor the identification can ever be absolute, else the theory of knowledge would prove that knowledge was impossible, and all good sense would go by the board.

If we regard things ideally and ontologically, we may say with Hume that whatever is distinguishable is separable. In this sense the events that common sense regards as interdependent are just as separable as those which it regards as disconnected. Every one admits that earlier things are independent of what follows upon them, since evidently annihilation or a different sequel might, for all we know, have intervened at any time without changing anything in what had occurred up to that point. But on the same principle later things are also independent of their antecedents, since they might have arisen from other causes or might have existed from all eternity, or might have been suddenly created *ex nihilo*. Yet all this is true only if we abstract from the world as it happens to be constituted, on the ground that it is contingent and irrationally complex, and might as well not have existed, or might have been wholly different from what it is. The moment we consent to admit the order of nature as actually established, all this independence of thing from thing disappears. Even earlier things cannot then be called independent of their consequences, since they are pregnant with them, and may be inferred and reconstructed by those to whom the consequences are known.

The same ambiguities infect the question of the dependence or independence of knowledge and its object. Regarded abstractly, substance is independent of appearance, since it might have existed unperceived : and appearance is also independent of substance, since it might have arisen without

any occasion, as idealists believe is actually the case. But, taking the world as God has made it, neither can exist without the other. Even at the time (if there was a time) when substance moved about alone, like Adam without Eve, it was constituted and predestined for the future partnership; for its structure involved changes of structure which in due season would involve the genesis of appearance; as still happens daily when any one is born or awakes. Dialectically considered, all this involution and evolution is full of redundancy, arrest, and open alternatives; but considered naturally there is nothing paradoxical about it or not shrewdly to be foreseen by one whose acquaintance and sympathy with nature were deep enough: for the standard of naturalness is nature itself. Therefore a realist who is also a naturalist will not hesitate to admit a mutual dependence between substance and appearance, although certainly they are not the same thing nor logically inseparable; but they hang together and reflect one another like a poet and his works. Only if arrested and isolated would the material world and the bodily life of animals seem not to involve sensation and thought and not to be involved in them; but to arrest and isolate these parts of nature would be to denaturalize them.

If the independence of substance and appearance maintained by a realistic philosophy is thus deeply qualified, so is the identity postulated between them. This identity in any case touches essence only, not existence; it is not his knowledge or his mind that the naïve realist identifies with the object, but only the essence immediately intuited by him that he identifies with its *essence*. Even when he is right in this, as he is when knowledge is adequate, the act of attention is not similar to what it attends to. Knowledge has an essence of its own which it is far from reporting when it reports on any chance object. Ideal relevance consists precisely in this power to intuit an essence which we do not embody, but which may be embodied in some other suitable thing, as the essences pea-green, sphere, similarity, and

duality may be naturally embodied in two peas. In any case, even when the essence intuited is identical with that embodied in the object, the intuition and the embodiment remain different in existence, origin, date, place, substance, function, and duration. An essence may appear in any number of instances without forfeiting its identity ; it may now have the ideal status of an object of intuition, and again the material status of the form of a thing. It is precisely this ideality, this amphibious but incorruptible quality, that distinguishes any essence from any fact, and makes essence (as Socrates discovered) the key to the problem of knowledge.[1]

Realism accordingly is the union of two instinctive assumptions, necessary to the validity of knowledge : first, that knowledge is *transitive*, so that self-existing things may become the chosen objects of a mind that identifies and indicates them ; second, that knowledge is *relevant*, so that the thing indicated may have at least some of the qualities that the mind attributes to it. These two kinds of realism, though they may rise and fall reciprocally, like the pans of a balance, are like those pans necessary to each other : if either disappeared, the other would collapse. If relevance were wholly denied, it would be in vain hotly to assert the independence of the object ; that independence would be undermined. An unknowable substance, even if it existed, could not be the object designated by a conception which, being by hypothesis wholly

[1] By " essence " I understand a universal, of any degree of complexity and definition, which may be given immediately, whether to sense or to thought. Only universals have logical or aesthetic individuality, or can be given directly, clearly, and all at once. When Aristotle said that the senses gave the particular, he doubtless meant by the senses the complete fighting sensibility of animals, with the reactive instinct and sagacity which posits a material object and places it in its external relations, here, now, and in such a quarter. But the senses as understood by modern idealism suggest rather a passive consciousness of some aesthetic datum, and this (which I call intuition) can never find anything but an ideal individual, which being individuated only by its intrinsic quality, not by any external or dynamic relations (since none are given), is also a universal. This object of pure sense or pure thought, with no belief superadded, an object inwardly complete and individual, but without external relations or physical status, is what I call an essence.

irrelevant to it, could not specify even its place, date, or relation to anything else. Similarly, if transcendence or transitiveness were wholly denied in its turn, so that the object could neither subsist when not known nor become the object of any other thought than the one which now knows it, relevance too would be eliminated; for the thought and its object would have become identical, and a thing cannot be relevant to itself. Knowledge in this case would perish by compression, by ceasing to aim at anything, as in the other case it would perish by futility, being condemned to aim always at an unattainable target. Some remnant, therefore, of each kind of realism must always persist, if knowledge is to be posited or to be actually valid at all: and the defender of realism, or of the possibility of genuine knowledge, has merely to show to what degree transcendence and relevance are achieved in particular instances. It is quite conceivable that the proportion of these two necessary ingredients should vary, as knowledge is addressed to various kinds of objects. I will attempt to show how the case stands in respect to three important spheres of knowledge: and the proof that in each our knowledge claims to be, and actually is, in some measure, both transitive and relevant, will be a triple demonstration of the truth of realism; though the exact force and scope of the demonstration will differ in each instance.

II

BIOLOGICAL PROOF

When the proverbial child cries for the moon, is the object of his desire doubtful? He points at it unmistakably; yet the psychologist (not to speak of the child himself) might have some difficulty in fixing exactly the sensations and images, the gathering demands and fumbling efforts, that traverse the child's mind while he points. Fortunately all this fluid sentience, even if it could be described, is irrelevant

to the question ; for *the child's sensuous experience is not his object.* If it were, he would have attained it. What his object is, his fixed gaze and outstretched arm declare unequivocally. This attitude of his body identifies his object *in itself*, in its physical and historical setting ; for it shows what particular thing, in the same natural world as the child's body, was the object of this particular passion. If the object which the body is after is identified, that which the soul is after is identified too : no one, I suppose, would carry dualism so far as to assert that when the mouth waters at the sight of one particular plum, the soul may be yearning for quite another.

The same bodily attitude of the child identifies his object *for us.* In perceiving what his senses are excited by, and which way his endeavour is turned, we can see that the object of his desire is the moon, which we too are looking at. That we are looking at the same moon as he, can be proved by a little triangulation : our glances converge upon it. If the child has reached the inquisitive age and asks, " What is that ? " we understand what he means by " that " and are able to reply sapiently, " That is the moon," only because our respective bodies, in one common space, are discoverably directed upon one material object, which is stimulating them simultaneously.

The attitude of the child's body also identifies the object *for him*, in his ensuing approaches or references to it. When in stretching his hand towards it he cannot touch it, he learns that this bright good is not within his grasp, and he makes a beginning in the experience of life. He also makes a beginning in science, since he now adds the absolutely true predicate " out of reach " to the rather questionable predicates " bright " and " good " (and perhaps " edible ") with which his first glimpse of that object had supplied him. The active and mysterious thing, co-ordinate with himself, since it lies in the same world with his body and affects it—the thing that attracts his hand, is evidently the same thing that eludes it. His failure would have no meaning and could teach him

nothing—*i.e.* could not correct his instinctive reactions—if the object he saw and the object he failed to reach were not identical; and certainly that object is not brightness nor goodness nor excitements in his brain or psyche, for these are not things he could ever attempt or expect to touch. His instinct to touch the moon is as primitive as his instinct to look at it; and the object of both efforts is the same, because the same external influence arouses them, and with them the very heterogeneous sensations of light and of disappointment. These various terms of sense or of discourse, by which he expresses the present agency, under whose attraction and rebuffs he is living, are merely symbols to him like words. They are miscellaneous in their intrinsic character—sights, sounds, smells, contacts, fears, provocations—and they are alternative or supplementary to one another, like words in different languages. The most diverse senses, such as smell and sight, if summoned to the same point will report upon the same object; and even when one sense bears all the news we have, its reports will change from moment to moment with the distance, variation, or suspension of the connection between the object and our bodies; and this without any necessary change in the object itself. Nay, often the very transformation of the sensation bears witness that the object is unchanged; as music and laughter, overheard as we pass a tavern, are felt and known to continue unabated, and to be no merriment of ours, just because they fade from our ears as we move away.

The object being thus identified by our bodily attitude and by its other physical relations, the aesthetic qualities we attribute to it will depend on the particular sense it happens to affect at the moment, and on the sweep and nature of the reaction which it then calls forth in us. This diversity of experience and of symbols is normal, and when it does not amount to a direct contradiction, it irritates us only if we are unreasonable and egotistical; and even the contradiction which may arise, and which truly demands a solution, resides

in the implications of our terms concerning the movement and powers of the object, not in the sensuous or rhetorical texture of these terms themselves. Looking at the moon, one man may call it simply a light in the sky; another, prone to dreaming awake, may call it a virgin goddess; a more observant person, remembering that this luminary is given to waxing and waning, may call it the crescent; and a fourth, a full-fledged astronomer, may say (taking the aesthetic essence before him merely for a sign) that it is an extinct and opaque spheroidal satellite of the earth, reflecting the light of the sun from a part of its surface. But all these descriptions envisage the same object—otherwise no relevance, conflict, or progress could obtain among them. What that object is in its intrinsic and complete constitution will never be known by man: but that this object exists in a known space and time and has traceable physical relations with all other physical objects is given from the beginning: it is given in the fact that we can point to it. If it did not so exist and (as sometimes happens) we were suffering from a hallucination, in thinking we were pointing at it we should be discoverably pointing at vacancy; exploration would satisfy us of that fact, and any bystander would vouch for it. But if in pointing at it we were pointed to it, its identity would be fixed without more ado; disputes and discoveries concerning it would be pertinent and soluble, no matter what diversity there might be in the ideal essences —light, crescent, goddess, or satellite—which we used as rival descriptions of it while we pointed.

Animals, then, in pursuing, touching, or recoiling from surrounding things, evidently know them. This knowledge is transitive, since the things known exist side by side with the animal they stimulate, and prior to the reaction and perception which they occasion. This knowledge is also relevant, no matter what sensible essence may be called up by it before the mind, since such essences are the apparent qualities of the thing perceived. The senses of all animals supply them with such signs and their thoughts can often

rehearse and anticipate the movement of things by reckoning it up in symbolic terms such as words. It is evident that all animals have relevant and transitive knowledge of their environment; so that realistic knowledge is but another name for vital sensibility and intelligence.

III

PSYCHOLOGICAL PROOF

Modern philosophy, without being very sceptical in spirit (it has not been disinterested enough for that) has undertaken a psychological criticism of science and common sense, calculated to show that all supposed facts are only ideas constructed by the human mind according to its own principles, and having no further existence. This criticism, since it was psychological, could not consistently go on to deny the existence of the human mind, its successive ideas, and its habits of interpretation. It could not deny, except by committing suicide, that knowledge is transitive within the psychological realm, and truly describes the march and structure of experience; it could reject the claim of knowledge to be transitive only in respect to certain physical, metaphysical, or religious objects, which the modern mind had become suspicious of, and hoped to feel freer without.

Even in regard to these traditional burdens, however, the psychological reform of human faith was somewhat ambiguous and halting. It professed to discredit the operations of the intellect, but not to suspend them. We were not asked to abolish our conception of the natural world or even, in practice, to cease to believe in it: we were to be idealists only north-north-west, or transcendentally; when the wind was southerly, we were to remain realists. The pronouncements of the practical intellect had no doubt been reversed in a higher court, but with this singular proviso, that the police and the executioner, while reverently acknowledging

the authority of the higher tribunal, must unflinchingly carry out the original sentence passed by the lower.

When this sort of criticism is applied to the biological facts invoked in our first proof, it evidently will change nothing in the aspect of those facts. In the picture of the world which we shall still continue to frame, we shall see the senses of every creature reporting to him sundry objects and changes in his environment ; and the cognisance he takes of these outlying matters will be, in that sphere, obviously transitive and true. Theoretically, however, our proof will be invalidated ; because we shall have learned that, at bottom, no animals and no world of the sort necessarily conceived exist at all, and no realistic knowledge. If the idea we have of the world—and must continue to have—were true, then indeed the knowledge possessed by those who would live in that world would be realistic ; but as this idea is only an idea, as it is objectless and (since it professes to have an object) is false, only intransitive knowledge, that is, the possession of objectless states of mind, will exist in reality.

But this consequence, accepted by the psychological critic when material objects are concerned, is not accepted by him in principle, or applied consistently. As I have already indicated, he does not regard his own theories also as objectless and false ; these he thinks true realistically. There are human minds, apart from his idea of them, and they were endowed, before he or they discovered the fact, with a particular transcendental logic, which they were bound to apply to their progressive experience ; there are unknown numbers of centres in which this experience is gathered in various degrees ; and there are successive shocks or sensations, inexplicably distributed in a real time, to which those minds may apply their innate categories. And not only does the psychological critic assume that he possesses transitive knowledge of all these historical matters, but his criterion of criticism itself is dogmatic : for instance, he assumes that when he feels two things to be incompatible, nature cannot combine them,

and that when he finds it easier, in obedience to his instinct of intellectual parsimony, to get on without some idea, God cannot have been so lavish as to create the corresponding reality. Naturally it is not on such dogmatic assumptions of its own that his criticism of knowledge is directed.

In empirical idealism criticism of knowledge is thus frankly arrested at the threshold of psychology and history ; successive sensations, or selves, or phases of experience exist, and are aware of one another's existence in a realistic fashion. Even transcendental idealism in its more popular forms inherits this realistic outlook. This is especially plain when the transcendental principle is reduced to a mere teleology present in human experience, or in universal history : the distribution of facts and existences then remains the same as in empirical idealism, and the knowledge that vouches for them is just as transitive : all that is added is the belief that, by a miracle of finality, all these facts have, from the beginning of time, expressed certain very human principles of dramatic logic and moral purpose, and that they must continue to express the same for all eternity. Similarly in the theistic interpretation of the transcendental philosophy. Here the transcendental principle becomes an eternal existence and power, over and above the detail of its manifestations in time. In this case realistic knowledge not only bridges the chasm between the various centres and episodes of finite experience, but unites them individually with God, who exists consciously and unchangeably in himself, as well as ideally or formally in our destiny.

A more resolute attempt to banish transitive knowledge is made in the pantheistic and mystical forms of transcendentalism. We then hear that the absolute spirit alone exists, and either neutralizes all the details of universal experience in the unity and simplicity of his being, or thinks them all at once and eternally. In either case time, which is the great principle of perspective and distribution in empirical idealism, is synthesized into timelessness ; and the divisions and succes-

sions which made realistic knowledge possible as well as requisite are reputed to fall away. All knowledge (if it still deserves that name) will be intransitive possession by the absolute of its own nature.

This theoretical escape from realism is vitiated, however, by a radical defect. It does not represent what even its advocates habitually and honestly believe, but only what, in a warm argumentative moment, they imagine they ought to believe. Parmenides and the Indians themselves were obliged to admit laws and methods of illusion or opinion, and to offer the world a sure prescription for ultimately getting rid of itself : so that not merely as men, and by virtue of an excusable weakness, but as adepts of their moral disciplines, they remained realists. The case of our modern transcendentalists is still more desperate : for while they must deny the reality of time (they would be realists otherwise), their whole moral inspiration is notoriously bound up with the sense of time, progress, and evolution ; indeed, it often issues in little else than a philosophy of change. It is certainly possible, in abstracted contemplation, to survey change without believing in it : the surveying glance in any case must span the distance it takes note of. But transcendentalism is not contemplative, it is vital ; and of all vital assurances and vital necessities the most imperious is the belief in time. A living being, enduring the flux of events and living in constantly varying retrospect and expectation, especially a breathless, busy, hopeful, experimenting modern, can hardly bring himself to doubt that the very past he recalls was once present, and that the very future he expects and works for may become present in due time ; but this belief is the purest and most radical instance of realism.

The critic of realism, on the contrary, must maintain that the past and the future exist only in the present idea of them, else, according to his principle, they could not now be known : in knowing them he cannot admit that we know more or less inadequately realities as self-centred and self-existent as the

present thought that knows them. Hard as the doctrine is, he must bring himself to say that the past and the future are nothing but ideas in the present. Conscience, especially his own modern conscience, requires him to admit the equality of all phases of life in respect to reality and intrinsic status. Yet his whole method of philosophizing remains subjective. He cannot purge his distrust of the intellect, which makes him deny transitive knowledge, of its egotistical insolence ; his romantic and rebellious impulse is to say that if he cannot contain things external to him such things cannot exist. But egotism, when practised by the present towards the past and future, loses half its evil by losing all its plausibility.

Belief in time is, I think, the deepest belief we have : it is requisite for the acceptance of the witness of memory, and for rational action and hope. It is the soul of introspective psychology. Yet there is another belief which critics of knowledge have been even more loth to question, indefensible though it be on their principles : the belief in other men's minds. While their method ought evidently to establish not so much solipsism as a solipsism of the present datum, yet it never consents to doubt the whole comedy of human intercourse, just as the most uncritical instinct and the most fanciful history represent it to be. How can such a mass of ill-attested and boldly realistic knowledge fail to make the critics of realism uncomfortable in their own house ? Is it because the criticism of realism in physics, without this realism in psychology, could never so much as begin ? Or do they love to attack dogmatism so much that, if need be, they will become dogmatists in order to do so ? Or is it simply that their criticism at bottom was a work of edification or of malice, not of philosophic sincerity, and that they keep this particular social realism without a qualm, because they need it to justify their moral reflections and to lend a false air of adequacy to their egotistical method ?

IV

LOGICAL PROOF

The backsliding of critics does not impair the principle of criticism : had they been more intrepid, perhaps they might have impugned consistently the reality of time, origins, and evolution, and escaped the realism which the assertion of such a reality involves. This might have been done by retreating into the immediate, in order to rest in the direct and minimal datum of consciousness. Such a disintegration of intelligence, to be instructive, ought to be radical ; more radical, for instance, than that which Hume or Fichte accomplished. What, according to them, was the ultimate datum of experience ? Hume said : some perception, as of heat, colour, or pleasure. But why, we may ask, a perception, and not merely the heat, colour, or pleasure ? Simply because criticism had not quite disintegrated convention. Hume's expression was correct enough, but what was correct in it was naturalistic. Everybody knows that the specific qualities of heat, colour, and pleasure are never actualized, never intensively present, unless a perception (and a perceiving organ) exists. A living body must focus itself, or some part of itself, on an appropriate stimulus before heat, colour, or pleasure can be intuited. Hume knows this, however, by looking over his shoulder and remembering what sort of a world he is living in : it is not the pleasure, colour, or heat that says so.

Similarly, what Fichte divined about an absolute act of the ego positing a non-ego, and then by reflection positing itself, conceals some modest truths about nature. The actual datum has a background, and Fichte was too wise to deny it : hence this myth about the birth of knowledge out of unconscious egos, acts, and positings. It is quite true that the throb of being which we experience at any moment is not proper to the datum—a purely fantastic essence—but to ourselves ; it is out of our organism or its central part, the

psyche, that this datum has been bred. This living substance in us has the gift of sensibility and is reactive; and being intent, in the first instance, on pursuing or avoiding some agency in its environment, it projects whatever (in consequence of its reactions) reaches its consciousness into the locus whence it feels the stimulus to come, and thus it frames its description or knowledge of objects. In this way the ego really posits the non-ego: not absolutely, however, as Fichte imagined, nor by a gratuitous fiat, but occasionally and for the best of reasons, when the non-ego in its might shakes the ego out of its primitive somnolence.

All this, however, is ulterior natural history, which Hume and Fichte instinctively import into their criticism; it does not help them to the truly immediate datum. On the contrary, it prevents them from discerning this datum in its purity. The datum is no perception, state of mind, or bit of experience; it is not a moment of life both the existence and the character of which are obvious. A present conscious moment is so called in view of other moments and of a past and future conceived to surround it, but not given in it. Without these extraneous associations and interpretations the absolute datum would cease to seem an event, new and contrasted with what went before. As it is given, the datum lies wholly in its own category: if a sound, it is just such a sound; if a pain, just such a pain. There is no indication whatever of a thing that emits the sound, nor of a self that hears it; there is no indication of a flux of sense-data in which this sound turns up; or, if the datum is itself a change, there is no indication that this change supervenes upon something permanent or upon other changes. We have come upon a present object without roots that we can see, without conditions, seat, or environment. It is simply an essence.

The being proper to essences is not existence. When the datum is said to exist something is added to it which it does not and cannot contain—the finding of it, the assault, the

strain, the emphasis, the prolongation of our life before and after it towards the not-given. These concomitant contributions of the psyche weight that datum, light it up, and make it seem at once substantial and incidental. Its imputed existence is a dignity borrowed from the momentum of the living mind, which spies out and takes alarm at that datum (or rather at the natural process that calls it forth), supposing that there is something substantial there, something dangerous that will count and work in the world. But essences (as Berkeley said of his "ideas") are inert. Even in the most excruciating pain, it is not the quality of the feeling that can injure us, but only the organic process which it betrays. For, undoubtedly, whenever an essence is given an existence is involved, or rather two: one is involved logically—the fact that this intuition is taking place; the other is involved according to the constitution of the world we live in—the organic process without which intuitions do not arise. But no existence was given to that existing intuition; and if, like that intuition, we absorb and lose ourselves in the essence given, we shall find no evidence of any existence. Events are instinctively assumed; we move through them, rehearse them mentally, and gather that they are going on; but only qualities are given absolutely.

This purely ideal character of the datum appears not only on a close scrutiny, but it turns out on reflection to be inevitable. The great characteristic of what exists is to be in flux; not only does it continually lapse and move forward, abandoning some part of its essence, but it is jostled laterally by a crowd of neighbours alien to its nature. It is a creature of circumstance, compacted and surrounded by external relations. Now a datum may have any degree of complexity, and may figure a whole universe; but no external relations can be given in it connecting it as a whole with anything foreign to it: in other words, the datum cannot appear under the form of existence, but only as a pure essence. Certainly the essence, when the fact that it was given is reflected upon,

is seen to have touched existence at one point, and to have acquired this one external contingent and unstable relation—that it was given then, there, and to that person. But this circumstance was not part of its given nature. By virtue of his own existence and instability that man now saw and now ceased to see that essence. His intuition existed and lapsed like any other event, but the essence did not change its nature when he abandoned it for another, nor did it acquire existence because he thought of it.

That existence is not immediately given has not escaped the mystics. Many of them have felt that existence is an adventitious emphasis cast upon ideal objects by will, love, or sin. Relieve the pressure of these personal forces, and the illusion disappears: for in truth (so they would say), apart from our sin, love, or will, nothing exists. Even Kant, who was no extreme mystic, thought all he could think of was imaginary. Existence is imputed to data—correctly or incorrectly—by our obsession with them. And it is not they that exert this magic over us, but quite different subterranean forces at work in the world and in ourselves.

For naturalists and men of science, too, existence is something more than the logical or aesthetic quality of what is found—a quality which they often slight. To exist, for the naturalist, means to exert force, to push one's way through the world. *Die Wirklichkeit*, said Schopenhauer, *ist das Wirken*. But to operate is to be unintelligibly entangled in external relations called history, evolution, causation; and no such operation can be given in that absolute datum to which criticism must appeal in the end.

If we once see clearly that the datum is not an existing thing, nor a state of mind, but an ideal essence, a very interesting corollary comes into view. The sort of being that essences have is indefeasible: they cannot lose it or change it, as things do and must if their being is existence. Therefore intuition, or pure acquaintance with data, has an object whose whole reality is independent of such a perusal of it. This

independence is not physical, because the object here is ideal, and never exists at all. But its logical or aesthetic character, which is all the reality it has, is inalienable : for that reason, perhaps, it was called by Plato τὸ ὄντως ὄν ; being which is intrinsic, essential, and contingent on nothing else, least of all, of course, on knowledge. So that when our roving thought lights up one of these intrinsic possibilities, it discovers an object ontologically far more necessary and fundamental than are physical things or pulses of feeling. It follows that acquaintance with essences or ideal terms is pre-eminently realistic knowledge. The circle of essences which human faculty can bring before us is limited, not by the absence of other possible themes, but by the bias of our endowment and the circumstances of our life. Pure intelligence within us—if we have such a thing—is by no means hostile to what, so far, has remained outside. Those yet unintuited essences can be brought into our experience, of course, only by an enlargement or shift in human nature. But human nature is elastic, and the realm of essence is infinite ; and if we grew more imaginative and less egotistical we might be more ready to pour out our spirit, in sacrifice or in playfulness, on what is not relevant to our own fortunes. What we have not intuited has as much ideal reality, and for other possible souls as much possible charm, as what we call beautiful. In hugging our humanity, as we very properly do, we need not grudge a speculative respect for what remains non-human. For it surrounds us on every side, ideally as well as materially, and we know that it surrounds us.

Even the essences we take some note of have many necessary ideal relations which escape us. Logically the essence of a right-angled triangle involves the Pythagorean proposition, but psychologically we may have no occasion or no power to discover it. Nature herself, like our thought (which for the most part expresses nature), is selective in respect to essence, and reproduces only a part of that infinite labyrinth. If physical (or at least terrestrial) space had not happened to

be Euclidean, Euclid certainly would never have thought out Euclidean space : yet all he says of it would have been just as intrinsic to that essence as it is now.

Even ideal contemplation, therefore, is realistic. The relevance of knowledge in this case is absolute, since our object is simply what we happen to think of. The transitiveness of knowledge is indeed wanting in one sense, since the object does not exist materially, but in another sense is complete, because this ideal object is immutable. Transitiveness in knowledge has two stages or leaps : the leap of intuition, from the state of the living organism to the consciousness of some essence ; and the leap of faith and of action, from the symbol actually given in sense or in thought to some ulterior existing object. The first leap, which is primary and fundamental for knowledge, alone concerns us here. It reveals some universal term, which borrows nothing whatever from the observer except its presence to him, which is perfectly adventitious to its nature, and not indicated there. Essences, like things, become objects by accident. Consequently knowledge of essence too is transitive, terminating in an object which is self-determined in its logical sphere and essential relations, and may be revealed to many minds at different times, in various contexts, and with more or less completeness.

V

CONCLUSION

It appears from these various considerations that all reasonable human discourse makes realistic assumptions ; so that these proofs, as I venture to call them, are necessarily circular : without assuming realism it would be impossible to prove realism or anything else. What I have endeavoured to show is merely that biology, psychology, and logic require and fortify this assumption, not that a person willing to dispense with biology, psychology, and logic need be a realist.

You cannot prove realism to a complete sceptic or idealist; but you can show an honest man that he is not a complete sceptic or idealist, but a realist at heart. So long as he is alive his sincere philosophy must fulfil the assumptions of his life and not destroy them.

KNOWLEDGE AND ITS CATEGORIES

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By Roy Wood Sellars

I

INTRODUCTION

The close student of contemporary philosophy can have little doubt that the drift is increasingly toward realism. The first principles of the idealism so long dominant in English-speaking countries have been bluntly challenged. To the younger generation, trained in science and sympathetic toward naturalism, it has gradually been borne home that the traditional systems were inadequately founded, that their epistemological principles were seldom clearly formulated and cogently defended. This feeling of an unsatisfactory situation in philosophy must be connected with the marked increase in all the sciences of a reflective attention to axioms and methods. Impressionism must give way to methodical analysis. What is desirable in philosophy at present is a fresh start of a systematic and co-operative kind in the light of such knowledge of nature and of man as is practically assured.

It is not the intention of the present paper to make a systematic attack upon idealism. Criticism of idealism will be quite incidental to the main purpose—the presentation of the critical realist's view of knowledge.

While both common sense and science are admittedly realistic in their outlook, the working out of an adequate realism has discovered itself to be no easy task. The first

wave of realism busied itself with an attack upon subjective idealism or mentalism. Thrusting aside other motives and angles of approach, it concentrated upon a denial of the Berkeleian principle that *to be is to be perceived.* This selection was an excellent bit of strategy. The objective idealism of the time was like the great Boyg, impalpable and invulnerable:

> " Forward or back, and it's just as far :—
> Out or in, and it's just as strait ! "

But while this first wave of realism got certain results, it tended to narrow the horizon in an almost scholastic fashion. Knowledge was largely identified with perception, and perception itself was interpreted as an *intuition* of non-mental characters. The result was an analysis of knowledge into mental act and non-mental object. I shall try to show that this limitation of knowledge to the apprehension of characters, whether qualities or relations, had disastrous consequences, because it shut the eye to farther reaches and problems.

The second wave of realism developed in America, and largely consisted in an attempt to eliminate the supposed mental act of intuition in favour of a pan-objectivism. As against romanticism a desirable stress was laid upon the validity of analysis. On the psychological side there was a bid for an alliance with behaviourism of the consciousness-fleeing sort. In short, the hypothesis made was that mind, or consciousness, is rightly but a term for a temporary class of entities, which are the same out of this class as in it.

Both these realistic movements, which are usually classed together as neo-realisms, have been confronted with serious objections. With many of these my colleagues have already made the reader familiar, and I shall not go over the ground except where some examination of it is necessary to bring home the principles I wish to enforce.

But is there not another possible line of development, offering more hope of satisfactorily covering all the known facts and distinctions ? Let us see.

The first two waves of realism worked on the assumption that *all* knowledge can be only the literal presence in experience and to awareness of the objects known. Historically, we may say, they started from the positions of Berkeley and Hume. They attacked not the anti-physical realism of these writers so much as their mentalism. The assumption is, then, that the objects of knowledge are what is given or intuited. But what is intuited analyses into character-complexes. Locke, Berkeley, and Hume were in agreement upon this point, and I see little reason to believe that their conclusions will be reversed.

But is it so certain that the *object* of knowledge is the character-complex of which we are aware? Is not this assumption the primary mistake of the modern development of philosophy? Now, as I understand it, critical realism stands for the reality and significance of another kind of knowledge than that of the intuition of character-complexes —a knowledge which presupposes this givenness of characters as a foundation, and yet goes beyond it in affirming physical existents of which knowledge is possessed.

Critical realism accepts physical realism. Like common sense, it holds to the belief that there are physical things; and, like enlightened common sense, its idea of the physical world is moulded by the conclusions of science. It is a criticism of *naïve* realism, and an attempt to free it from its prepossession that knowledge is, or can be, an intuition of the physical thing itself.

The critical realist is not afraid of being called an "epistemologue"! There are certain reflective problems which he feels to be genuine and unavoidable. These problems concern the nature and conditions of human knowledge. It is of the greatest importance that there be no confusion of epistemology with metaphysics. The distinctions we shall be led to make will be epistemological, not metaphysical, ones. Thus epistemological dualism is entirely different from metaphysical dualism, and has no necessary relation to it. The critic who

condemns epistemological dualism for the sins of metaphysical dualism is arguing entirely beside the point.

But what is epistemological dualism? The term needs definition. As a preliminary indication of its meaning, let us contrast it with the epistemological monism of the neo-realists. For them, the datum presented *is* the ultimate reality. The idea is the object. In Berkeleian terminology, the idea is, at the same time that it is an idea, an independent reality which only temporarily enters into an external and non-modifying relation to the individual percipient. If this is epistemological monism, then critical realism is a form of epistemological dualism; it holds that knowledge of objects is mediated by ideas which are *in some sense* distinct from the objects of knowledge. Mere identification, at least, does not meet essential difficulties. It must be remembered that, in the act of knowledge, the idea which gives the content of knowledge (the *esse intentionale* of the scholastics) is other than the object of knowledge. In what sense it is "other than" the object affirmed is obviously one of our problems. We must remember, also, that in the first act of knowledge it is, itself, not an object, though it may become such in a subsequent act. What the critical realist stands for, then, is a more careful analysis of the act of knowledge than has been common. We must appreciate subjectivism and yet be realists.

It is to be regretted that the neo-realists have ignored the possibility of going behind what they call "dualism." It is bad scientific method to leave in the rear a line of reflection which has attracted so many able minds, which seems necessitated by causal facts, and which has the advantage that "it fully accounts for error and illusion."[1] Does the distinction between the content and the object of perception involve a naïve picture theory? May there not be a unique logical identity between them of the sort knowledge requires? May not data possess *cognitive value* and be so used in the act of knowledge? The fault with representative perception was

[1] *The New Realism*, p. 4.

that it did not analyse the act of knowledge justly. It was not much more than a clumsy breaking loose from naïve realism. It did not assign with delicate exactness the status of the various factors.

II

THE NATURE OF KNOWLEDGE

The very existence of epistemology as a reflective science proves that the nature and the conditions of knowledge have become problems. For good and sufficient reasons the unsystematic and relatively uncritical outlook of common sense has ceased completely to satisfy, while the various special sciences have very naturally ignored all general queries which could not be allotted to their fields of investigation and be met by their methods. Two of the reasons why epistemology forces itself on the thinker may be indicated: (1) the increasing realization that the content of perception is a function of many conditions and that these conditions find their focus in the organism; and (2) the association of adequate knowledge with science.

The first reason leads to a serious doubt whether it is possible to intuit physical things in the immediate and facile way that common sense tends to suppose. May it not be that these sensible characters which are open to inspection and so readily taken to be literal aspects, surfaces, and inherent qualities of physical things are subjective substitutes for the corresponding parts of the physical world? Such substitutes would be of assistance to us in our pressing need to adapt ourselves to our environment, and, at the same time, would easily pass current to our minds as the actual physical things to which we were reacting and adjusting ourselves. Common sense makes no distinctions not forced upon it.

The second reason bears witness to the increasing prestige of science. If you would really know the world, it is felt you should find out what science has to say about it. Yet how

different the tale told by science from this parti-coloured landscape of sensible things which presents itself to the percipient! A more than Copernican revolution has occurred to startle the reflective mind loose from common-sense realism. And yet science has no peculiar admission to a hidden source of intuition. Its data and methods are open to all who care to investigate them.

I do not think there can be any question that science works upon the assumption that there are physical realities and processes external to the percipient organism, and that these assist in the rise in the organism of subjective data which are the raw material of scientific knowledge. It is thus in partial conflict with the outlook of practical life in which we think of ourselves as *noting* things outside of us. In the one case, the causal direction from the physical thing to the organism is stressed; in the other, the act of attending, of being interested in things, is uppermost. The physical thing is largely identified with the datum of awareness, and over against it is put the active complex of bodily adjustment and felt interest. I shall try to show that this duality in consciousness is quite harmonizable with the assumption of science as soon as we relinquish naïve realism.

Now Locke tried to work out the implications of the science of his day. Hence he turned his back upon naïve realism. He was the avowed champion of what Reid later called "the ideal system," that is, the conviction that the individual apprehends only his ideas. I am here concerned only with the skeleton of Locke's theory. "It is evident," he writes, "the mind knows not things immediately, but only by the intervention of the ideas it has of them." Thus he affirms a substitutional process in the place of a direct intuition of the physical world. What we apprehend is the mental content which arises in the mind as a result of the action of stimuli upon the sense-organs. But this thesis should have been only a beginning. It was primarily a study of the conditions of knowledge, not of its nature. It is well known how Locke wavered in his con-

ception of knowledge, making it consist sometimes in a copy of extra-mental objects, sometimes in the agreement of ideas. Locke neglected to carry through a thorough analysis of the knowledge-claim.

The problem before Locke in his realistic mood was as follows: If knowledge of the physical world is somehow mediate, since it cannot be a bare glimpse of the physical world in its own realm of being, how shall we conceive the factors of this knowledge? Here, as I understand it, Locke's scholastic inheritance entered, and encouraged him to assume that primary qualities were *like* the *forms* inherent in material substance. But has epistemology the right to begin with a system of metaphysics in this fashion? And we should bear in mind the undeniable fact that modern thought has become sceptical of the substance-quality schema of the past.

Berkeley attacked all the weak joints of Locke's armour. What does it mean to assert that an unknowable substance supports qualities? And, again, if primary qualities are existentially real entities, how can mental ideas be like them? The stress is here laid upon a disparateness of essence. Something mental cannot be *like* something non-mental. Metaphysical dualism once more gets in the path of epistemology to confuse it.

It is evident that the epistemologist's aim should be, first, an analysis of the knowledge-claim, and, second, an interpretation of this claim in the light of all the relevant facts.

Lockian realism played into the hands of metaphysical dualism because it assumed that we first know our ideas as objects, and then postulate physical realities which can be known only so far as they resemble the primary objects of knowledge. We shall make a different beginning. We shall point out that we claim, from the first, to *know* physical objects, and that we admit, as a result of reflection, that we *intuit* only contents. In other words, knowledge and intuition are at first fused and identified; only as reflection proceeds is

the givenness of content distinguished from knowledge and regarded as an instrument of knowledge.

The usual criticism of Lockian realism is interrogatory: How can you know physical things if your primary knowledge terminates upon mental objects? You cannot get at the physical things to compare them with your ideas. You assert that ideas are mental substitutes; but that is a matter of faith. And, besides, is it very likely that mental objects can be satisfactory substitutes for non-mental realities? The critical realist points out the mixture of validity and invalidity in these questions. His main contention is that the knowledge-situation and claim is ignored and falsified. Ideas are made too substantial and cease to be thought of as contents in terms of which we interpret objects of knowledge. The directness of knowledge is lost sight of. While knowledge is mediate both in the sense that it is not intuition and in the sense that there is much constructive activity at work in the mind, it is yet direct. We mean independent objects and we interpret these objects in terms of ideas. The fact that we can dwell upon ideas for their own sake should not be allowed to confuse us with respect to the knowledge-claim.

We have tried to make the knowledge-claim explicit and to distinguish between knowledge and the presence of contents. We have pointed out that the presence of contents is simply a necessary factor in knowledge. Because they have not sufficiently analysed the act of knowledge as reflection makes it explicit, the neo-realists dismiss what they call dualism in the following manner: "The only external world is one that we can never experience, the only world that we can have any experience of is the internal world of ideas. When we attempt to justify the situation by appealing to inference as the guarantee of this unexperienceable externality, we are met by the difficulty that the world we *infer* can only be made up of mental pictures in new combinations." [1] Now I think that it is clear that these thinkers assume that the assertion of

[1] *The New Realism*, p. 5.

the physical world as the object of knowledge must be based on an inference if you are not a naïve realist. The critical realist denies this assumption. The reasons for a belief in the physical world can be given to back up our instinctive assertion of it, but the critical realist is primarily only developing the act of knowledge. The distinction between the self and the external world has a genetic foundation. In the second place, the neo-realist does not distinguish between intuition and knowledge. The much-abused and ambiguous term " experience " is employed as a blanket to cover every type of what may indiscriminately be called knowledge. Suppose that we introduce more exact terms as follows : " The physical realm is one that we can never intuit, as common sense tends to suppose ; the only realm we can intuit is the realm of data." But because we cannot intuit the physical realm it does not follow either that we cannot know it or that we must infer it.

If reflection convinces us that we cannot intuit the physical thing but that what is given is a character-complex, it is nonsense to continue to try to intuit the physical world. We should try to analyse our experience more fully, to see whether knowledge is necessarily the same as intuition or the awareness of content. Now the critical realist holds that we must distinguish between the givenness of content and knowledge of the physical thing, and that we do not *infer* a realm of existents co-real with ourselves but, instead, *affirm* it through the very pressure and suggestion of our experience. A genetic approach is quite essential to philosophy. Instead, then, of saying that " the world we *infer* can only be made up of the matter of experience, that is, can only be made up of mental pictures in new combinations," we should say that " the world we *affirm* can only be known in terms of the characters given in experience." In short, contents are given or intuited, while objects are known.

Let us now see whether we can explain why nearly all realists have assumed that knowledge is some sort of an intuition of the physical existent known. That naïve realists

tend to such a position would, I believe, be granted by all. Even M. Bergson desires a penetrative intuition of the object in which the subject and the object somehow merge. That this desire and tendency has led to the shipwreck of much epistemology has, for some time now, been my firm conviction. It has led to the confusion of datum and object.

The truth is that reflection begins within the setting of common-sense realism, the outlook upon the world built around perception. That the individual's field of experience has a certain structure, and is shot through with meanings and affirmations, is a matter of undeniable fact. I open my eyes and perceive concrete *things*. What are concrete things? *They are not merely character-complexes.* They are co-reals to be adjusted to, independent, common, and full of various capacities. We have here the practical category of thinghood, to which epistemology has not done justice. Perceived things are co-real with the percipient, and independent of him in exactly the same way and to the same degree that they are independent of one another.

It is pretty clear, then, that there are two elements in perception: *the affirmation of a co-real and the assigned set of characters or aspects.* Suppose we call these, respectively, the object of perception and the content of perception. The content is intuited; the object is reacted to and affirmed.

When we perceive another individual perceiving, the situation is clear. The percipient organism attends to its object. We can see the focusing of the eyes, the tension of the head, the directive set of the whole body, all leading usually to behaviour toward the object. The psychologist knows that the instincts and interests of the organism are aroused, and are finding expression in this behaviour.

But internally, or in the percipient himself, we have the content of perception, and, over against it in a qualifying way, the motor complex of adjustment combined with the realistic meanings and expectations which are characteristic

of perception. Thinghood and perception go together. It is the refusal to recognize this fact and the attempt to thin perception down to the content intuited that constitutes the chief error of much of contemporary thought.

We may put our result in the following way. No motive has entered to cause us to doubt the existence of a physical realm co-existent with the percipient; but reflection has discovered that the content with which we automatically clothe these acknowledged realities is subjective. But let it be noted that neither subjective idealism nor agnosticism is justified by this development. And it is to be hoped that philosophy has got beyond the habit of jumping to hasty conclusions. What is needed is a patient and persistent analysis, which is able to go forward step by step while doing justice to the structure and meanings of the individual's experience. The facts which break down naïve realism work within the realistic set of affirmations. Hence it is illogical to infer subjective idealism from them. On the other hand, only if knowledge must be an intuition of the physical existent is agnosticism implied. But what right has a thinker to make such a tremendous assumption? If the facts indicate that we cannot intuit the physical thing perceived, it is far more probable that knowledge is not an intuition than that we do not possess knowledge. The nature of knowledge has simply become a reflective problem.

It has often been the tendency in epistemology to regard the contrast between perception and conception as basic. We now see that the contrast between intuition and a non-intuitional interpretation of knowledge is profounder. What kind of knowledge does man actually possess? I am at present concerned with knowledge of the physical world through external sense-perception. We shall consider knowledge of other kinds of reality (other at least as ordinarily interpreted) afterwards.

The factors of knowledge are now apparent: (1) the affirmation of an object or ideatum; (2) the idea or content

given to the knowing self; and (3) the interpretation of the first in terms of the second. To these three on the subjective side, there must correspond the affirmed existent with its determinate nature on the objective side. The interpretation of the object may be of the almost automatic sort characteristic of perception, or it may be of the more conscious sort found in science.

Thus, when the knowledge-situation is made explicit, we realize that the object must be known in terms of the content which is given to the knowing self. In the act of knowledge, the content has a different status from the object, and yet is in some sense assigned to it. We are compelled to think the object as it is presented to us in the content. Of course, we can be as critical as we please in our construction of the idea which seems to us satisfactorily to give the object; but, after due selection and supplementation, the judged idea is accepted as revealing the object.

Yet we must probe deeper. What is the fundamental postulate of knowledge? It is the cognitive value of the idea. The content in terms of which we think the object must have the property of reproducing the character of the object in some measure. This identification of content and object is made automatically in perception. The book which I perceive *is* oblong, blue in colour, fairly heavy, etc. Thus the postulate of knowledge has its foundation in our instinctive assignments, and critical judgment only continues what has thus been begun. To know an object is to assign a content to an object, to think the object's nature in terms of the given content. There must, as we have said, be something reproducible about the object if it is to be known. Only to the extent that this is so can the idea give the grasp on the nature of reality that knowledge seems to postulate. But we need have no *a priori* theory as to what idea and object have in common. Assuredly, there is no need to postulate an objective form distinct from matter in the Aristotelian sense. All that the postulate of knowledge seems to me unequivocally to demand is that the

object have a structure and relations and powers which can be revealed in the content of the idea.

In the foregoing, I have tried to analyse and bring together three topics for investigation—viz. the act of knowledge, the nature of knowledge, and the conditions of knowledge. Critical realism differs from naïve realism in its denial that the physical thing is intuited. Knowledge for it involves the distinction between the content and the object of knowledge. Yet it agrees with naïve realism in its belief that the physical thing is the direct object of knowledge. It is critical realism in that it appreciates the nature of knowledge more critically in the light of the act of knowledge and of the actual conditions of human knowledge. While, properly speaking, there is no trace of subjective idealism in critical realism, it does justice to that play of mental activity that modern logic and psychology stress. It is synoptic in a way that other epistemological systems cannot claim to be.

Let us now see whether we can make clearer the mistake in traditional representative realism. The copy-theory is essentially a thwarted naïve realism. When the conditions of knowledge force a thinker to admit that it is impossible to intuit the physical thing, the natural first tendency is to say that the percipient intuits a mental object which is *like* the postulated physical object. Obviously, there is in this compromise no adequate reinterpretation of the act of knowledge. Hence, the mental object comes between the mind and the real object as something upon which knowledge verily terminates. The hypothesis of similarity between physical reality and mental object is something additional to knowledge. Scepticism can thus enter very readily.

The temptation to representative perception is due to the automatic formation of the practical category of thinghood. The clothing of the external object in perceptual content leads to the view that physical things have sensible surfaces and sensible qualities. It is then difficult for the thinker to shake himself loose from this way of thinking of the physical world.

Yet it leads to the sort of scholastic metaphysics that led Locke astray. His substance, with its inherent primary qualities, is but the ghost of the intuited physical thing of common sense.

It may be of interest in this connection to interpret Berkeley's arguments. The important fact is that we can accept the majority of his points against Locke and still be physical realists. He did not do justice to the total experience of perception. It is, in fact, only recently that psychologists have begun to do so. Of course, we should not hold that the physical world is inert just because there is no visible activity in the content of perception. Since we do not intuit the physical thing, we should not expect to intuit its activity or lack of activity. It should be clear by now that epistemology has its metaphysical implications in this sense, at least, that a naïve view of knowledge involves a naïve view of the object of knowledge.

The conception of knowledge which we have been suggesting can now be more precisely stated and defended. Knowledge is just the insight into the nature of the object that is made possible by the contents which reflect it in consciousness. Naïve realism makes the impossible claim to intuit the object, impossible because it would involve the leaping of spatial and temporal barriers in an unnatural fashion. Critical realism, on the other hand, is satisfied to admit the fact of causal mediation while yet proclaiming that the object affirmed and intended is known in terms of the content presented to the knowing self. The content has cognitive value. I believe that this is what my colleagues mean when they assert that (in so far as knowledge is accurate) the content given is the essence of the object. It is a way of saying that the content is relevant to the object, that it has a sort of revelatory identity with the object, that it contains its structure, position, and changes. The situation is so basic that it can hardly be further reduced. The content of knowledge offers us the fundamental categories, such as time, space, structure, rela-

tions, and behaviour, in terms of which we think the world. To postulate the validity of these categories is *ipso facto* to assert that knowledge-content gives us the constitution of the world. There is, of course, no sharp break between perception and propositional knowledge, for propositional knowledge is based upon perception, to which it must remain responsible. Scientific knowledge is clearly only a more explicit, more critical, and more developed form of knowledge than perception. Its conception of nature is based upon tested and interpreted data to the obtaining of which all the mental ingenuity of the ablest of men has been directed. The study of such knowledge is primarily the affair of logic, though there is and should be no conflict with the findings of psychology.

I am aware that the first reaction of the reader may be that of dissatisfaction with this interpretation of knowledge. There is the desire to intuit, and somehow to handle mentally the very stuff of the physical existent. The illusion nourished by the fusion of content and object in the outlook of common sense is so deep-rooted that it is at first hard to overcome. To know a thing is easily thought of as having the very independent existent itself open to an immediate and penetrative inspection. But the instruments to such an inspection are not possessed by the human organism. The more one reflects upon the situation, the more one realizes that the mind is not a searchlight, and that the self does not possess an " eye " which has the power of bringing it into contact with the surfaces of things in a ghostly fashion. By its very origin and locus, human knowledge cannot contain the material of the object. Yet it does not fail to be knowledge because it is not what knowledge cannot be. To condemn knowledge because it is not something else which we mistakenly desire is unreasonable. Let the critic explain what he means by knowledge, what his ideal of knowledge is. It will, I believe, be found extremely vague or else unharmonizable with the actual conditions of human knowledge. This to the realist; the

idealist really relinquishes the object of knowledge and satisfies himself with the content.

We have no good reason to regard the datum as arbitrary —quite the contrary, in fact. If, under apparently the same conditions, the content of perception changed in a capricious way, it would be impossible to regard it as material which could mediate knowledge of the object. But experience indicates an actual, causally-based agreement between the physical existent perceived and the content of perception. One flower is white and small, another is blue and large, etc. These differences in content are rightly taken by all to point to differences in the physical objects.

But what is the exact nature of this agreement ? We must realize by now that no merely dialectical answer will do justice to the problem. The total psychophysical situation must be appreciated. A determinate existent is the object of the percipient organism's attention, and so controls the rise of the content of which the self is conscious and which it assigns to the existent as an external object. The nature of the existent must be co-related with the datum aroused and assigned. Neither the content nor its assignment can be arbitrary if the demand of knowledge is to be satisfied ; for does not knowledge imply some sort of revelation of the very constitution of the object known ? Now the whole psychophysical setting of perception seems to me to guarantee that agreement between datum and object which makes it possible in the knowledge-claim to impute the datum to the object and to think the object in terms of the content of thought. The more critically this identification is made, the less of error there will, of course, be in our knowledge.

We can conclude that the physical world reveals itself in the data of observation. This revelation is causally mediated and is furthered by mental operations. Just because man is an individual, he cannot expect to be in a more direct cognitive relation than this to other things. In the next section we shall discuss more fully the exact meaning of these terms—

revelation, identification, and cognitive relation. The problem arises from the recognition that in knowledge we claim to grasp reality in some measure, and yet that we cannot intuit it.

It may not be amiss to call attention to the psychological fact that the content of perception is the summation of much interpretation and synthesis. The psychophysical organism has in this way enlarged and perfected the agreement between the subjective datum and the object of perception. This fact brings home to us the necessary realization that the causal foundation works within a non-mechanical medium. The stimulus is taken up and supplemented by mental operations. The shifting of attention from one part of the object to another part, the institution of comparison, the supplementation of eye by hand, all these assist in the forthcoming of fuller agreement.

Scientific knowledge requires additional methods and a finer technique. Yet there is at its basis nothing different in nature from that which we have noted in perception. The logic of science emphasizes the critical interplay of data of observation and theory. Ideas and methods become objects of reflection.

This setting and tested responsibility of the knowledge-content allow us to claim a genuine conformity between it and the physical existents known, a conformity which justifies the thought of the existent in terms of the content. The situation is, of course, unique, and metaphors will not much help us. The knower is confined to the datum, and can never literally inspect the existent which he affirms and claims to know. Penetrative intuition of the physical world is impossible just because we humans are what we are, organisms stimulated by external things. Knowledge rests upon the use of data as revelations of objects because of what may, I think, be rightly called a logical identity between them. No term can, however, be a substitute for an appreciation of the actual situation. Physical being is determinate, and knowledge-content is a function of factors so connected therewith that it reflects it and has cognitive value with respect to it.

III

THE CATEGORIES OF KNOWLEDGE

Thus far we have concerned ourselves in the main with the act of knowledge, endeavouring to bring out as explicitly as possible the nature of knowledge and its fundamental postulate ; also, we have given attention almost entirely to the knowledge of the physical world gained through external sense-perception and the reasoning upon the data so secured. We shall now proceed to broaden the scope of our inquiry to include other types of knowledge, with the aim always in view of bringing into relief the basic distinctions or categories of knowledge. Such categories can be designated as epistemological, in contrast to space, time, and causality which are primarily metaphysical. In other words, metaphysical categories appear as features of the content of knowledge in its first intention, whereas epistemological categories are the distinctions bound up with the act of knowledge or with knowledge of knowledge.

There are five sets of terms which have always been of primary interest to the epistemologist, viz. (1) the self or knower; (2) consciousness and mind ; (3) idea, reference, and transcendence ; (4) phenomenon or appearance ; (5) the object of knowledge. I shall give these terms more or less separate analysis, and then seek to bring them together in an ordered relation.

Objectively we speak of the individual as the locus and agent of knowledge. As to how this individual is constituted, there may be more or less uncertainty. He may be considered by some as an organism of high capacities, of which knowing is one ; others may hold him to be a complex of body and mind in a more or less external relation. Which view is correct we are not here called upon to decide. This much, however, we are assured of, that knowing takes place in individuals of the most concrete sort and not in any consciousness-in-general. It is with reference to such individual knowers that the conditions of knowledge upon which the critical realist

places so much stress have meaning. The individual knower is, of course, aided by others in the way of communication. The analysis we have made in no way favours solipsism. Quite obviously, the individual knower is a product of untold centuries of biological and social evolution.

Subjectively the knower is experienced as the self, though all the agencies used to secure knowledge are not elements in the experienced self. I mean that the phrase " I know an object " is the condensed unit of knowledge. The experienced " I " or subject of knowledge must be distinguished from the idea of the self as the object of knowledge. Just how the subject or experienced " I " and the self as known are related to the complex called objectively the individual, is a question which we are not called upon to solve as epistemologists. I would point out, however, that the subject-self is a factor in the field of the individual's consciousness, so that we are here again in contact with the mind-body problem.

The primary setting of epistemology is given in the gross contrast between the individual knower and his environment. Subtler cases of knowledge must be harmonized with this setting. Thus the critical realist accepts and believes that he can justify the biological setting of knowledge. The interest of the individual knower is in affirmed objects taken as co-real and his behaviour is toward such objects. That the individual can become interested in himself is a very natural corollary of such a situation. Knowledge of self and knowledge of others are closely connected.

This concrete idea of the knower enables us to mention the fact that knowing usually subserves vital interests. It is, however, quite able to become the specialized object of an interest like mental curiosity which develops a partial autonomy. The mental life has different levels and differentiations.

Let us at once admit that there is nothing revolutionary in this setting. The realist is seeking not the mysterious and the romantic but the true. What he desires to do is to give human thought a clear and self-consistent formulation and

setting. His belief is that there has not been sufficient unbiased analysis of all the factors in cognition.

But it will be suggested that many schools of thought have admitted this realistic setting, and yet have turned from it in the direction of idealism by apparently finding that it is impossible to separate ego and non-ego, subject and object. We shall later analyse the so-called cognitive *relation* between the knower and the known. It will suffice to point out now that this cognitive relation is different from a real or physical relation. If we identify the ego with the knower, we shall maintain that the ego is just as independent of the non-ego (and the reverse also holds true) as one thing which has needs can be independent of things which will satisfy them. But we are in the main abstracting from the larger position and relations of the individual and concentrating on the act and fact of knowledge. *The critical realist holds that knowledge is a function of the knower rather than a peculiar, real relation between the knower and the known.* What we are concerned with here is the relation between the act and content of knowledge on the one side, and the object on the other side. The critical realist asserts that this problem is specific and cannot be solved —as many neo-realists wish to solve it—by a discussion of relations in general as to whether they are external or internal.

Just because we are limiting ourselves to epistemology as completely as possible, we must avoid any dogmatic statements with regard to the mind-body problem. We can, however, point out that the knower seems to be incarnated in the organic individual. The self identifies itself with the organism in perception much as the content of perception is identified with the object of perception. "Consciousness" and "mind" are very fundamental categories for the epistemologist. Of these two we shall first examine consciousness.

Consciousness is one of the many equivocal terms of philosophy. In psychology it has usually been taken as equivalent to the psychical. In philosophy its meaning has somewhat varied with the particular theory of knowledge advocated.

Always in this field it has, I think, had reference to some phase of cognition. Cognition is in part a function of the psychical, whereas the psychical is not always concerned with cognition.

The psychological usage most general is "the stream of consciousness," the changing field of the individual's experience. Whatever is enjoyed or given to awareness is a bit of consciousness in this inclusive sense. And this field has a structure or form of a characteristic type. At the genetic level with which we are concerned, this form may be described as a reference to an object. Those of us who went to school to James's *Psychology* bear in mind his frank statement of the postulates of psychology. That he did not take these postulates more seriously in his philosophy is to be regretted. "Human thought," he wrote, "appears to deal with objects independent of itself; that is, it is cognitive, or possesses the function of knowing." And again: "The reason why we all believe that the objects of our thoughts have a duplicate existence outside, is that there are *many* human thoughts, each with the same objects, as we cannot help supposing. The judgment that *my* thought has the same object as *his* thought is what makes the psychologist call my thoughts cognitive of an outer reality." [1] Another recognition of the form of consciousness is to be seen in the following quotation from Stout: "All subjective states are psychical; but not all psychical states are subjective. Sensations in general, so far as they enter into the relation of subject and object at all, fall to the side of the object, and not to that of the subject." [2] In other words, it is in terms of sensations that objects seem to be presented.

Now, as I understand the situation, the psychologist abstracts from the object of perception and all the realm which is the object of scientific knowledge, and concentrates upon the content of perception. He desires to break this content up into its structural elements and to find the conditions of their

[1] James, *Psychology*, pp. 271-272.
[2] Stout, *Groundwork of Psychology*, p. 3.

peculiar synthesis. One of his chief methods is the use of introspection. In short, the psychologist studies the psychical as such.

The critical realist desires to point to the fact that idealism has given this concentration by psychology upon the psychical a false interpretation. While the psychologist of to-day is a realist and believes in the physical realm (except when he tries to philosophize and gets confused) and uses the results of the physical sciences, the idealist is persuaded that the content of perception is the object of perception. The psychologist consciously makes the abstraction from cognitive reference, while the idealist asserts that there is no need of such an abstraction, because *experience* is an ultimate: "Etwas Wirklicheres als das Erleben gibt es nicht." But all modern realists are protesting against this neglect of the form of consciousness, of what we may call cognitive reference; and the critical realist adds that the content of knowledge is not simply identical with the object of knowledge.

So far as the psychologist disregards the form of consciousness, he may be said to deal with the psychical. But epistemology is primarily interested in cognition. It will not, therefore, make the abstraction that psychology makes. In a very real sense, epistemology only supplements psychology, since cognition is a function within the *organized psychical*. What we all live in is this organized psychical with its cognitive form. It is this cognitive form which is uppermost when we speak of being *conscious of* some object. It is the location of this function in the psychical which makes us, perhaps, call the total field of experience consciousness.

In the preceding section of this paper we have laid decided stress upon the delusive idea of knowledge suggested by the structure of experience at the perceptual level. The object of perception is identified with the content of perception by a natural mistake, and so existence is distributed to the sensuous contents as things co-real with the individual. The subjective pole of experience (the subject-self) has its relation of more

or less active compresence with such things, as they are recognized and interpreted. This situation gives the idea of *knowledge as intuition*, which has played such a rôle in philosophy and which we have criticized so severely. Increased *consciousness of* things is increased ability to discriminate presented things and increased familiarity with them.

In this discussion of consciousness, I have tried to do justice to it both as a general term for the individual's stream of experience and as a term for a form and function within that stream. Consciousness as awareness requires structure and mental synthesis. At the level of naïve realism, it requires a given content permeated by meaning and set as an affirmed object over against a subject-self. Such an awareness is a product of functional synthesis, and is by no means a transparent and immediate act. But to say this is not to deny that it possesses the apparent simplicity of every satisfactory function. As in the field of ethics, the term " intuition " is to be guarded against only when it is used to signify something primitive and unmediated. Critical realism but renders explicit the implications of cognition, by distinguishing knower and known, content and object, in the light of processes and conditions.

Idealistic empiricism favoured the identification of consciousness and mind. And since consciousness was conceived as a passive, floating, undynamic ethereal something, the location of mental processes was vaguely conceived. Without begging the mind-brain question, we can assert that the individual's mind is an organ and, like all organs, a functional part of his complex being. It is through this organ that he possesses certain capacities of the highest moment to him in his struggle for existence, power, and appreciation. Such capacities are called mental capacities, and are intertwined with the psychical and consciousness on the one hand, and with the brain on the other.[1]

[1] Speaking for myself alone, I should not hesitate to assign these capacities to the brain as the differentiated organ concerned with behaviour. It seems to me as justified by the facts and as logical as the assignment of digestive

The correct epistemological use of the terms " phenomenon " and " appearance " is an affair of considerable importance. These categories have had an almost criminal career, especially as leagued with " noumenon " and " thing-in-itself." An unambiguous disposition of these terms should be of great strategic advantage.

Coming back to the outlook of common sense, we find that primary knowledge tends to be conceived as an intuition of the physical thing itself. We see *aspects* of physical things, their qualities and surfaces. Then, perhaps, we say that we see the way the thing *appears* under certain conditions and positions. Or we contrast its appearance under certain conditions with its standard aspect. All this is, of course, a sort of compromise within naïve realism. The main conviction remains ; yet the reflective individual is more aware of difficulties, a little perplexed by the illusiveness of the thing.

But we who have given up the sensible, physical thing realize that the belief in an appearance as a manifestation *like* the physical thing is misleading. Is the appearance of the thing mental or non-mental ? The truth is that the term undermines naïve realism. What position does the critical realist take ? It is this : an appearance is a datum, correlated causally with the object of perception. This datum varies with objective conditions, such as distance, position, and lighting. We may contrast the standard datum, which is the best material for knowledge, with less cognitively satisfactory data. But until one breaks sharply with naïve realism, appearance will always mean something of the nature of a partial apprehension or of a transmission or of a reproduction under disturbing conditions. The intuitional ideal will still determine interpretation.

capacities to the stomach. The past confusion of consciousness and mind, combined as it usually was with a crude epistemology and an unevolutionary conception of the brain, led to much controversial beating of the air. The limitations of the knowledge of the physical world gained by the data of external perception were not realized. I shall have something more to say about this in the last section of the present essay.

When Kant asserts that we know only phenomena, he means that the mind knows what it constitutes and regulates. In the phenomenal realm the mind is at home. The realm of things-in-themselves is aloof and unattainable. Critical realism breaks with Kantianism on two points: (1) it looks upon the total content as empirical, and is sceptical of the Kantian theory of the constitutive understanding; and (2) it returns to the older tradition of knowledge as implying a reality independent of the ideas cognitive of it. Because of this fundamental difference of approach, the Kantian terminology can scarcely be correlated with our own. The physical existents, which are the objects of perception and knowledge for critical realism, are not identical with the Kantian noumena. For Kant, the phenomenal world, a world of construction, is the physical world—a view diametrically opposed to our own outlook.

Let us next examine the nature of "reference." The idealist has often made merry with realism on the score that it is impossible to transcend experience. Historically, it is easy to trace the derivation of this objection. It rests upon the inability to master epistemology. We shall, however, chiefly concern ourselves with pointing out the assumptions behind it.

Experience is evidently conceived by the idealist as a *medium* within which the knower is confined as a fish is in water. Knowledge of an existent which is not literally a part of the *content* of experience is conceived as a miraculous and impossible leap out of experience. But this whole set of prejudices ignores the very nature of knowledge, for it rests upon spatial imagery and a refusal to analyse the knowledge-claim. The fundamental mistake is the confusion of the content of knowledge with the object of knowledge. The content of knowledge must be experiential. No realist assuredly would wish to deny this fact. But the idealist goes farther, and asserts *that we can know only what is given.*

Neo-realism seems on the whole to have accepted this

principle, and to have devoted its efforts to prove that the non-mental is given. But the inevitable result is the relinquishment of physical realism. This consequence is apparent in the writings of G. E. Moore, Holt, and Russell. The content given consists of qualities, relations, and universals. Are these data non-mental ? Or are they mental ? Such is the nature of the conflict between much of contemporary idealism and realism. The critical realist agrees with the idealist that the content is mental, but strikes his counter-blow by asserting that knowledge is a claim to know an object in terms of this content. The object is known but not intuited ; the content is intuited but not known.

This analysis enables us to bring out the ambiguity in the current notions of transcendence. It is an empirical fact that I do affirm the existence of things and persons other than myself. I affirm them in the attitude I take toward them, an attitude guided by a datum with which they are ordinarily simply identified.

But knowledge of the existents affirmed requires no more transcendence than does this affirmation. The content of such knowledge is given at the time, however much inferential construction has been at work to its making, while the object to which the knowledge-claim assigns it is affirmed and not given. And this analysis brings home to us once more the significant fact that, for critical realism, the physical world is not an inference but a retained conviction held through reflection, because it harmonizes with all the facts as no other position will.

Affirmation never arises apart from some datum, perceptual or ideational. Thus, in perception, objects are clothed in spatial form and distinguished by position. In critical knowledge the intuitional setting is removed, and the element of position becomes a preliminary bit of knowledge valuable for the selection of the object intended. This minimum must be annexed to every specific knowledge-claim. It answers the question : What object are you thinking of ? If you

cannot tell what object you are thinking of, it is meaningless to tell what exactly you are thinking in regard to it.

There remain for consideration the two closely related categories of " objectness " and " cognitive relation." I shall try to show that there is no need for the assumption of a cognitive relation connecting object and knower.

The physical existent is not an object in its own right. It is *made* an object by the selective activity of the percipient organism. And this selection is behaviour on the part of the organism, preliminary, usually, to overt action upon the existent selected as object. The relation of the existent to the organism is causal ; it is the source of stimuli. But the selection of one existent rather than another *as object* is due to the *interest* of the organism. " Objectness " is a term which expresses the reaction of the knowing organism to that in its environment which stimulates its interest. Objectness is the expression of selectiveness. It is the focusing of the individual upon an existent which makes it the object of that individual's perception. The existent sends out stimuli of a causal character, and, in return, organisms respond to them in accordance with the capacity of their nervous systems. *Being an object* is an honour done to a thing by an organism, an honour of which the thing is quite unaware, if it be not another person and itself perceiving. In perception, therefore, the causal relation is from the thing to the organism, and not the reverse ; but this internal veering of attention upon the thing is so important and so intimately experienced that it seems to leap across space to the thing and terminate on it. In the outlook of naïve realism, the misinterpretation of selective attention to make it an intuition which leaps from the eyes is due to the fusion of the content of perception with this selective adjustment. Because the datum is identified with the object, we seem to be able to go out to things in a mental way.

It is plain to us now that the dictum, " No object without a subject and no subject without an object," is based upon the structure of the field of experience which itself reflects

the interested response of the percipient organism to things around it. Unfortunately, this correlation was given an idealistic interpretation, because the object was identified with the given content. What the dictum really stands for is the fact that a thing's *being an object* is an expression of the subject, and that a subject naturally selects things as objects. An existent becomes an object when it arouses the attention of an organism, but this character does not attach to it, for it is solely a function of the organism. The naïve realist is nearer the right of the situation than is the idealist. He feels that things are independent of their being perceived, that perception is an adventitious or external relation.

The denial of a peculiar, non-physical, cognitive relation follows from this analysis of objectness. Cognition is a *function* of the knowing organism as a result of its capacities and situation, and not a passive linkage of the organism to the thing known. I fear that spatial analogies have been at work here, and that naïve realism with its intuitional schema has furnished the suggestion. The actual processes and conditions of knowledge being unknown, the static form of consciousness dominates the first stage of reflection. The result is puzzlement when reflection begins. The critical realist digs deeper, and builds up a new theory of knowledge on the basis of a thorough understanding of the whole situation. When it is once illuminatingly realized that knowledge is not an intuition of an object but a function of the organism, it is at the same moment comprehended that there is no need of a cognitive relation. Knowledge consists of a content and a claim. Thus the conditions of knowledge come to the front in critical realism, and it is by these responsible conditions and capacities that knowledge arises in a responsible and directed way. The old notion that it was necessary to hitch object and knower together, by the aid of a supreme mind if that was the only way, was due to the relational idea of knowledge. Critical realism puts in its place a functional idea of knowledge.

Finally, we come to the question of the *kinds* of objects

known. Thus far we have designedly limited ourselves to the question of the nature of our knowledge of the physical world. We wished to show the complete rationality of a belief in a physical realm independent of the act of knowledge.

But once see that the object of knowledge is independent for its existence of the act of knowledge, and that there is no cognitive relation between them, and knowledge of past events in the physical world becomes as natural as knowledge of present conditions. We can *mean* a reality which no longer exists equally with a reality which exists at the time of the intention. *The time of knowledge is that of the act, and not that of the object.* As Locke pointed out, we can never be certain that an object which we have ceased to perceive still exists. But we can retain our valid knowledge of such objects, and such knowledge remains valid irrespective of the fate of the objects.

It will be remembered how puzzled the Greeks were by the idea of knowledge of what does not exist. I take it that this puzzle is characteristic of all intuitional types of philosophy. But so soon as we realize that the object of knowledge is selected by an internal intention, and that there is no cognitive relation, the puzzle vanishes. Our capacity to make an object out of what no longer exists is the best proof of the validity of critical realism. It shows that both the content and the objectness are parts of the act of knowledge.

Knowledge of the future is also knowledge of what does not exist. Granted that such knowledge must be hypothetical, it yet remains true that both the claim and the content are factual experiences of the present. We can locate the object as easily by means of temporal positions as by means of spatial positions. The framework of critical realism enables it to meet these age-old problems without embarrassment.

But physical existents and changes, past, present, or future, are not the only objects of knowledge. We can also know past experiences and the experiences of others. In other words, experiences can become the objects of knowledge. Let

us recall the distinction between data and objects of knowledge. The datum is the object of awareness, and is an analysable content. The object of knowledge is what is not so given, but is affirmed and interpreted in terms of the datum. Now memory is a typical example of knowledge of past experiences by means of present content. Neo-realism has been forced to hold that memory is the actual presence of the past event itself. But surely this contention outrages our thought of time, and introduces complexities in our thought of reality which should be a matter of last resort. The critical realist is led by his analysis of knowledge to adopt the more adequate view that the object of memory no longer exists, but that the claim and content are elements of the present act. It is not surprising that memory is often conceived after the manner of the naïve view of perception. Object and content are fused only too readily, and must be distinguished and put into their proper position by reflection.

I can see no objection to a critical copy-theory in the case of memory. The content can be *like* its object. We try to reproduce our past experiences in a more or less selective and schematic fashion in memory. The basis of this ability is some sort of conservation in the mind-brain.

We are now in a position to consider the question of an individual's knowledge of other selves. And let us here again disregard the self-body problem. When I claim to know other selves, there are two kinds of things which I may have in mind : their abilities and character on the one hand, and the contents of their respective streams of consciousness on the other hand.

As for knowledge of abilities and character, it seems to me obviously of the same empirical, inferential type as knowledge of the " powers " of physical things. The objects are of a higher grade and the data are more complex ; but the logic of the situation does not appear essentially different.

And yet this knowledge overlaps in a way and is furthered by knowledge of the contents of other minds. By communica-

tion, for example, we can penetrate more intimately into other selves than we can into other kinds of things.

Knowledge of other consciousnesses is different from knowledge of the physical world. It is a knowledge through asserted identity of content, whereas knowledge of the physical world is information about its object based upon correspondence-value of perceptual data. Thus, when I interpret an expression on the face of my friend as *meaning* amusement, I use the expression as a symbol of an experience which I regard as in its essentials the same for him as for me. Words which he uses are likewise admitted symbols of contents sufficiently identical in character. Such identity of character does not conflict with numerical difference of existence.

Other consciousnesses are, therefore, objects of my knowledge. They are affirmed to exist and cannot be intuited, but they are interpreted in terms of contents given in my own consciousness. For this reason, it is usually said that this other consciousness is inferred by analogy. There are decided objections to such an explanation if the term is taken in a technical way. The passage from behaviour to the assumption of an idea behind it corresponding to the idea behind similar behaviour on my part is instinctive and is confirmed by language and tested conduct. It is better to call it a natural assumption or postulate, rather than an analogical inference. And yet analogy works in its favour.

IV

THE GRASP OF KNOWLEDGE

The position at which we have arrived is realistic, and is as near natural realism as the conditions of knowledge permit. Physical things are the objects of knowledge, though they can be known only in terms of the data which they control within us. The postulate of knowledge is the cognitive or revelatory value of the idea taken as a content or character-

complex and not as a mental existent. In other words, the content which we apprehend must have the property of reproducing something about the object, of conveying in its own medium the form of the object.

But a word like "form" is not a sufficient answer to the inevitable demand concerning the grasp of knowledge. Let me therefore explain what this term means to me. In the first place, I see no need to postulate a metaphysical dualism between form and matter. Matter is just as much of an abstraction as form. Reality is formed matter. Reality has structure and organization. It has a determinate nature. It is for this reason that our categories such as space, time, structure, and causality have validity. To the extent that Aristotelianism and scholasticism separated matter and form they were guilty of a vicious and unnecessary dualism. It is reality that is active and the seat of processes, not a form or a matter.

But if the object of knowledge is a formed matter, the question may next be raised, What about the object can be conveyed to mind? Obviously not the being but the "form." To convey the being is impossible, for the thing must remain outside the knowing mind. To know the thing is therefore not to *be* the thing. Nor is to know the thing to have a copy-like reproduction of the thing. What, then, is knowledge? It is the recognized possession by the mind of the "form" of the thing, that is, its position, size, structure, causal capacities, etc. It is the mediated grasp of those features of the thing which are reproducible. To know these is to know the thing.

But just because these features of the thing are alone grasped, there is the danger, on the one hand, of identifying reality with form, and on the other, of making reality unknowable, because only its form can be grasped. The proper limitations of knowledge are not realized. Critical realism is not agnostic, because it does not begin, as agnosticism usually does, with an unexamined notion of knowledge. It maintains, also, that reality, itself, is the object of human knowledge.

But there is another approach to the nature of reality with which I have very little concerned myself. I have felt it wiser to concentrate upon the problem of the knowledge of the physical world gained through external perception; for, until some agreement is reached upon this point, it seems difficult to travel far along other lines. And yet the contents of consciousness are real. Do we know the psychical adequately? Is the psychical an integral part of the pulse of the functioning brain, an expression of creative synthesis? Or is it the very stuff of the brain? These questions are fascinating, and indicate the line of investigation which must next be undertaken. But this is neither the time nor the place for this work. I shall be more than satisfied if I have helped to make clearer the nature and conditions of the knowledge of the physical world gained through the data of external perception.

ON THE NATURE OF THE DATUM

ON THE NATURE OF THE DATUM

By C. A. Strong

The crucial question, in the problem of sense-perception, is as to the nature of the datum. By "datum" I mean what we are immediately conscious of. Six different views as to this have succeeded each other in the course of modern philosophy: (1) That the datum is the real thing; (2) that it is an ideal representative of the real thing; (3) that it is an ideal thing, psychological in its nature; (4) that it is an ideal thing, logical in its nature; (5) that it is a thing of psychological nature, but real; (6) that it is a thing of logical nature, but real—*naïve realism*, *representationism*, *psychological subjectivism*, *logical subjectivism*, *psychological objectivism*, *logical objectivism*. The view I shall try to recommend in this article, distinct from any of these, is (7) that the datum is the logical essence of the real thing. By "essence" I mean its *what* divorced from its *that*—its entire concrete nature, including its sensible character, but not its existence. To establish this, it will be necessary to show (1) that the things we are conscious of in sense-perception, as distinguished from the things we believe or affirm, are not the actual external existences; (2) that, on the other hand, they are not internal or psychical existences, either representative of the external ones or non-representative; (3) that, while they are logical entities—entities of the logical type—they are not identifiable with the things we perceive, but are only the detached concrete natures or "essences" of those

things.[1] Thus the three divisions of our discussion are marked out for us.

I

DATA ARE NOT THE REAL THINGS THEMSELVES

That they *are* the real things is of course the conviction of common sense. Common sense will not admit that objects are not really coloured, and sonorous, and hot and cold; and the leading motive of some recent philosophers seems to be a desire to justify common sense in this point. This can be done only by contradicting common sense on a much weightier point, namely, by asserting that objects are capable of possessing at the same moment and in the same spot contradictory qualities. For it is undeniable that an object which one person perceives as red another perceives as green, or as so like green as to be indistinguishable from it, and that where most people perceive a variety of colours some persons see only a more or less uniform grey. It is undeniable that a straight stick thrust in water looks bent, quite apart from any process of interpretation asserting that it actually *is* bent, and that the datum in this case (however much its character may be explicable by the operation of physical laws) consequently contradicts the object. It is undeniable that insane people hear sounds where there is no external sound, or none such as they hear. These are all cases of *perceptual* (as distinguished from intellective) *error*, and it is evident that they can be

[1] As I have elsewhere explained, I owe this precious conception to Mr. Santayana. I had long been convinced that cognition requires *three* categories for its adequate interpretation; the intermediate one—between subject and object—corresponding to the Kantian "phenomenon" or "appearance." At one time I used to designate this category as "content," since it agrees with the current conception of a "content of consciousness"; but, in my efforts to conceive it clearly, I was continually falling off either into the category of "object" or into that of "psychic state." What was my relief when at last I heard Mr. Santayana explain his conception of "essence," and it dawned upon me that here was the absolutely correct description of the looked-for category.

harmonized with the view that the data are the real things only by partially contradicting this view and asserting that whenever we are perceptually wrong they are not the real things, or else by entertaining the far from common-sense theory that because a thing is red that is no reason why it should not be also green (in the same place and at the same moment), and that because a thing is white that is no reason why it should not be also black.

It is worth noting *why* perceptual error is possible. It is possible because data are directly dependent on the individual organism, not on the external object, varying in their character with the constitution of the sense-organs and the way in which these are affected, and only secondarily and indirectly with the external thing. Thus the insane person hears hallucinatory sounds because his auditory brain-centre is abnormally irritated; the colour-blind person sees red as green because his retina or his visual brain-centre is not normally constituted; the straight stick appears bent because the light-rays have been accidentally refracted at the surface of the water, etc. We have no power of penetrating to the object itself and intuiting it immediately, but are dependent for our information concerning it on the effects which it is able to produce within the body. In a word, *data are subject to the law of psychophysical correlation.*

There is, then, a fundamental opposition between data and physical things, as science conceives these—physical things conceived as in a continuous time and space and as possessing no characters that contradict each other. An opposition such that, if we say that data are real, we are forced to say that physical things are not real—that they are arbitrary selections from data, or intellectual constructions made on the basis of data ; while, if we say that physical things are real—as I think we must—we are forced to conclude that data, as such, are not real. Either heat and cold just as we feel them are real, and then those vibrations of molecules which physicists assign as their objective cause are not real—except as other data of

touch or as data of sight; or else the molecular vibrations are real, and then the data are not so. Either colour is real, and then the oscillations of the luminiferous ether, reflected from the surfaces of objects, by which science explains it, are not real—and what we are told about the velocity of light, and its source in the sun and the stars, and the activity of atoms as its cause, is only so much intellectual deduction from and gloss upon the phenomena of colour and luminosity; or, if the physical facts, just as science describes them, are real, then the data are not so. Reality is something *attributed* to the data, solely in the sense that there are objects of which they are data; and when we learn that other somewhat different data—namely, those asserted by science—would more accurately present these objects, all excuse disappears for holding that the data themselves are real, *i.e.* continuously existent.

How impossible it is to identify physical things with data simply as such, appears with especial clearness when we consider the spatial and temporal characters of data and of physical things respectively. As regards space, a consequence of the dependence of data on the organism is that, as objects move farther and farther away from us, the data presenting them become smaller. Thus a human being becomes half and then quarter his normal size, and finally a mere speck on the horizon. We cannot suppose, consistently with physics or even with everyday sense, that the size of his body actually changes. Here is, then, a series of changes and differences in data corresponding to no real changes or differences in objects—a proof positive that the two cannot be identical. Data are presentments of objects from the point of view of the organism, they are not objects themselves.

Out of this principle of the diminution of apparent size with distance arises the whole element of *perspective* in visual perception. Some parts of a solid object are necessarily farther away from the eye than others, with the result of appearing proportionately smaller; in other words, the object is seen in perspective. Perspective represents a distortion of

real things, which fails to strike us as in glaring contrast with their proper constitution only because we are so familiar with it. It has also its practical value: if the relative distance of different things from us did not appear on their face, we could not make that distinction between what is at hand and what is farther away which is so essential to practice. It is none the less evident that the world as sense-perception presents it and the world as it is by no means coincide.

When we pass to time, this disparity becomes, if possible, even more evident. The distance of objects from us involves a difference in the time it takes them to produce impressions on us; a nearer object is perceived sooner than a farther one, but when the medium of action on us is light, the difference is so slight as to have no practical significance. It is only in the case of the stars that we perceive simultaneously events that are really years and even centuries apart. Yet, theoretically, and on a vastly minuter scale, the falling flakes of a snowstorm or the apparently simultaneous sounds of a battle-field are equally non-coincident temporally. When we see a gun fired at some distance, and hear the report several seconds after seeing the flash, the temporal displacement of the datum with reference to the real event is brought sensibly home to us.

All these (or the like) are well-worn examples in present-day controversy. It will be time to cease insisting on them when all parties recognize their inevitable consequence, that the physical thing cannot be identified with the datum as such. If, in the present section, we have now succeeded in proving this, the following among the views mentioned at the beginning of this paper will thereby have been excluded and disproved: (1) that the datum is the real thing—*naïve realism*; (3) and (4) *psychological* and *logical subjectivism*, (5) and (6) *psychological* and *logical objectivism*, in so far as they assert that the physical thing is identical with the datum. Consistently with the above considerations, the physical thing can only be either an intellectual construction made on the

basis of data, or a real existence brought before us by data. Which of these it is will depend very largely on the nature of data. Once these are recognized not to be physical things, the most natural supposition, or at least the one that historically has proved the most tempting, is that they are psychological in their nature, that they are perceptions-of-things, or perhaps sensations.

II

DATA ARE NOT PSYCHOLOGICAL IN THEIR NATURE

A psychical fact is commonly conceived to be a vision that flashes before the mind, the seeing and the thing seen being fused together into the unity of a single entity. In this way an emotion, as of anger ; a sensation, as of pain or cold ; a mental image, as of some one's face, is supposed to exist. But the trouble is that, when we see faces, we do not see our seeing of them—we see only the faces ; and the question therefore arises whether the consciousness is really given in and with the face, or the anger, or the pain, as this conception supposes it to be. James, after fruitless attempts to assure himself that he introspected it, bravely declared that it is not. What we take for consciousness, that thin, ethereal seeing of internal things, is, in his view, the sensations of attending, etc.

In short, when we speak of anything as a " datum," that which makes it a datum, the givenness, is not given along with the thing. It is an " external denomination," it consists in a relation between the thing given and something else. What this something else is, is perfectly clear, verbally at least ; it is " I," myself—anything given is given to *me*. And the relation of being given, the givenness or awareness (these are names for the same thing viewed from opposite ends), is not given along with the things.

" Datum " is therefore a treacherous word to use for what

is given, since it suggests that the givenness is given along with the thing. Here lies the immense advantage of the term "essence." For the first time we get the datum characterized with absolute logical sharpness. But the assumption that the givenness is given is the whole basis of the claim that the datum as such is psychological in its nature. Hence, with the replacing of the term "datum" by that of "essence," the thing designated is recognized not to be psychological, and, since we have shown it not to be physical, the chances are that it is logical, an entity of the peculiar type belonging to logic.

It will perhaps be argued that a pain or an anger does not cease to be psychological because we recognize that, when we introspect it, we perceive no awareness. In other words, *what* we see, apart from the seeing (introspecting), is in itself psychological. The reply is that, while this is true in the case of the pain and the anger, it is not true in the case of the face; what is given there is a physical thing (I mean the essence of a physical thing, not its existence). Still more obviously is this true when we do not merely imagine, but actually see, faces; if we abstract from the seeing or givenness, the entire datum is physical (in the sense of essence, not of existence), or, to put it in the usual way, it is "objective." Nothing can be more justified than the insistence of neo-realists, and indeed of all sound epistemologists, that the original datum of sense-perception has nothing subjective about it in the psychological sense—largely as we have shown it to be often (if not always!) subjective in the logical sense.

The psychical character of some data, then, does not lie in the fact that they are data, but in the accidental fact that a psychical thing, and not a physical thing, is given. Data as such, accordingly, are even in the case of psychological perception or introspection not psychological in their nature. And, once more, since they are also not physical (but at most presentments of the physical), the probability is that they are entities of logic.

III

DATA ARE NOT EXISTENCES

Before exploring this hypothesis further, let us look for a moment at the characteristic terms and propositions in which the psychological account of the datum has usually been formulated. Objects have been defined as " perceptions," their *esse* has been set down as *percipi*. Now a " perception " or, better, a " percept " means, in full, something perceived by me ; hence to assert that the *esse* of a thing is *percipi*, if we take the assertion quite literally, is to say that *it* consists in a relation between *it* and something else. This is obviously absurd. It is only if you conceive consciousness as a dimension of things, or things as made of consciousness, that the strict identification of *esse* and *percipi* becomes possible. But this is notoriously the current conception of consciousness ; when we are told that " the perception is in the object " or that the fundamental data are " experienced-things," it is evident that the conceptions of experience or perception involved contain no essential reference to an organism or ego. Whether this defect does not constitute a damning criticism of the subjectivist and objectivist theories in question, the judicious psychologist may be left to judge.

The proposition that the *esse* of objects is *percipi* may, however, have a different sense ; it may mean merely that objects continue to exist only so long as they are perceived. This, on the whole, I think, is the main intent of Berkeley. What is to be said of the proposition understood in this sense ? In the first place, since the thing perceived is the physical thing, and since this is not identical with the datum, it does not follow in the least from the fact that, when perception ceases, there is no longer a datum or anything given, that the physical thing whose essence was given no longer exists. The utmost that could be thought to follow is that the datum no longer exists. But the datum, *i.e.* the essence given, *no longer*

exists only in case it did exist when it was given—in case its givenness made it temporarily to exist. Givenness, however, as we have seen, is an external relation to an ego, and it is not obvious how the addition of this relation—how our awareness, in other words, of the essence—can raise it from a state of non-existence to one of existence. On the contrary, the very nature of awareness seems to imply that what we are aware of remains the same, either as existent or as non-existent, whether we are aware of it or not, and that what is changed is only ourselves, by our enjoyment or awareness of it.

Nevertheless it might perhaps be maintained that what in the intervals of our non-awareness has no existence, but is only a possibility of thought or perception, does by virtue of its givenness to us acquire a temporary kind of existence. And, in favour of this view, two principal arguments might be urged: (1) that through its givenness an essence acquires a definite position in time and space; (2) that the sensible vividness with which the perceptual essence is given proves it an existence.

Before examining the value of these arguments, let us represent to ourselves a little more definitely the alternative possibility—that the datum is *not* an existence. There can be no question that we are capable of having things given to us which are not existences—*e.g.* centaurs, perfect squares, ideas of virtue. To deny the possibility that the mind can fix itself on what is not an existence and occupy itself for the moment solely with that, would involve the most extravagant consequences, and contradict the commonest facts. These non-existents are of course in the broadest sense universals. Yet they vary greatly in their degree of concreteness; a centaur is more concrete than a perfect square, a perfect square is more concrete than virtue. The question will be whether a datum can be so concrete as even to have sensible vividness, and yet not be an existence, but only an entirely concrete universal, a universal of the lowest order. This would mean that the *same* datum exactly might be given to another person, or to the same person at a different time and

place ; in such wise that the datum as such would not be in time and space. That the data of perception are in fact universals of this description is the thesis of this paper, and is what has been meant by calling them essences. This view, and this view alone, seems to me to permit a satisfactory solution of all the difficulties connected with sense-perception.

Now let us consider first the objection that the data of sense-perception are existences because they are in time and space. That a visual datum has a certain internal extension —being the vision of a large or a small object, a near or a distant one—is undeniable, and likewise that, if my body as well is given, I may be justified in affirming that the object, as close to my body, is " here." But unless both the object and my body are real, and not dreams or hallucinations, the affirmation would not be valid ; and this is something that can only be *believed*. In other words, the affirmation of locality has reference only to the physical things that the visual data bring before us, not to the visual data as such ; the visual data as such are neither here nor there. They have no spatial relations to other possible visual data, but only spatial relations among their own parts—none, in short, that are not at this moment given. The fact that an essence is given, then, does not give it a position in space.

Nor does it give it a position in time. Perceptual data doubtless have a certain internal duration, but their relation as wholes to other data, or to existences that are not data, is no part of them, and can consequently only be matter of affirmation. And the affirmation, as in the case of space, is really with reference to the temporal position of the *physical thing* given, not to that of the datum as such. The datum as such has no temporal position except that which lies in the fact of its givenness, and the temporal position is that of the givenness (or, more strictly, of the state of the ego to which it is given), not that of the essence.

That the givenness of anything does not turn it into an existence belonging to the moment when it is given, may be

shown by two arguments. If it did, then I could not think of the past without turning it into a present fact; in short, I could not think of the past at all. Existences, again, are always particular facts; and if thinking of anything turned it into a present existence, then in thinking of man in general or of virtue I should turn them into particular present existences; in other words, I could not think of them at all. That a particular present existence is involved in thinking of a universal or in thinking of the past I do not mean to deny; this is the psychic state which is the vehicle of the thought (about which more later); but at present we are concerned solely with *what is thought of*, the datum or essence.

This may suffice to dispose of the argument that present data are necessarily in time and space; now for the argument that they are existences because they are sensibly vivid. This phrase marks the difference between imagining a thing and actually perceiving it; and there is undoubtedly a strong temptation to suppose that, when a thing is actually perceived, even the datum must be real. Our very idea of the unreal is the imaginary; while of the actually perceived we say, "Seeing is believing." But note that this very maxim confesses that the real is not seen to be such, but believed upon the evidence of sight. In other words, it is hard for the hallucinated person to believe that he is so; the dreamer scarcely knows that he dreams. The datum in dreaming and hallucination is only a candidate for affirmation, a means of affirming the reality of the physical thing—it is not itself real.

The main source of our tendency to think the datum an existence on the ground of its sensible vividness is, I think, our confusing it with the psychic state which is its vehicle. As we should not perceive if we had not sense-organs, so no data would be given if these and the connected brain were not endowed with sensibility. There are states of our sensibility which do not bring before us objects other than themselves—*e.g.* anger, or pain, or, in some cases, chill. An emotion of anger is not a perception of a state of our body; it is a floating

psychical condition, representing to be sure our reaction to an object. A pain, such as toothache, is apt to be localised in a definite spot, and, in so far, serves to bring before us the morbid process occurring at that spot; but this element of locality and physical reference is extraneous to the pain itself, and we can, if we wish, attend solely to the latter, in which case what we have before us is a pure state of our sensibility. Similarly with cold: it may bring before us a cold object, or it may be taken in itself as a state of our sensibility.

Now states of our sensibility do not cease to be such when they are used to bring before us objects. When I touch ice, I still feel, and feel in the particular way called feeling cold; when I hear an external sound, I still hear; and when I see, I do so by means of states of my sensibility which I know not how to describe except as visual sensations. At any moment I can turn my attention, at will, from the seen, heard, or felt object to the visual, auditory, or tactile sensation, the mere state of my sensibility; and, if my hypothesis is correct, this last is not brought into existence by the fact of my attending to it, but is simply brought under view. This state of my sensibility is indeed an existence, though a transitory one; if it did not exist, it would be impossible for the external object, the ice, or the bell, or the spray of leaves, to appear before us as a datum. But because the vehicle of the givenness of this essence is an existence, it does not follow that the essence itself is one. If it were, we should have *three* existences concerned in sense-perception—the physical thing, the state of our sensibility, and the essence—which even the most determined multipliers of metaphysical entities will think too many.

The example that seems to me to bring out most clearly the difference between the perceptual essence and the sensation is that given by James, of the after-image of the sun projected successively on the thumb-nail, on the wall of the room, and on a mountain-side, and bringing before us thus three (false) external objects of very different size. Throughout this experience I seem to myself to be able to observe that the after-image

retains the same *sensible* size. If so, the variation in the size of the objects—which is an essential part of what is given (when we do not introspect the sensation but perceive the false objects)—*must be something which the after-image has as a symbol and not as a sensible fact.* What is given to us, in other words, in sense-perception is the sensation as a meaning and not the sensation as a fact—or, to speak more correctly, what is given is the meaning and not the sensation. It is just as in reading, where what is present to the mind is the significance and not the mere printed characters. Now that this significance, or meaning, or essence, is not an existence and not in time and space, but, like the meaning when we think of a universal, a purely logical entity, is quite credible.

Two objections may be made to my treatment of this example. First, it may be said that I am venturing unjustifiably beyond experience in suggesting that the after-image exists and retains its size when my attention is turned, not to it, but to the false objects. The sensation—granting that we can attend to a pure sensation—exists only when we experience it ; a sensation which no one has is absurd. And since the sensation cannot exist when we are attending to the objects, it cannot have a size. I admit that an unfelt sensation, in the sense in which the word sensation is ordinarily used, is absurd ; but I persist in thinking that *that which* we feel, when we feel, *i.e.* distinctly attend to, a sensation, is capable of existing when it is not felt, and does so exist in all vision, hearing, and touching of external objects. This is a realistic view of introspection which is not popular. But it rests on the principle, now at last obtaining recognition, that knowledge is of its essence adventitious to what is known ; and it may appeal to the argument that, for us to know by experience that the *esse* of feelings is *sentiri* (and not, let us say, *sentire*), we should have, in experiencing them, to be conscious not only of the quality or state but of the consciousness, which according to James is not a datum of experience at all.

Moreover, the facts are difficult to construe on the idealistic

hypothesis. If, for instance, I allow the after-image to fall half on the thumb-nail and half on yonder wall, the part falling on the wall still appears vastly larger than the part falling on the thumb-nail; and yet it is, and can be observed to be, an exact half of the total image! I cannot persuade myself that between the time of my taking the half as a false object obscuring part of the wall, and so as different in size from the other false object, and my taking it as a sensation, it has undergone a change in size such that now the two halves are equal. It seems to me much more consonant with the facts to suppose that the size of the false object was itself false—that it was matter of imagination, or projected action, and not of sense.

To this it may be replied—and here we come to the second objection—that the size of the false objects is *felt*. I am inclined to think that this objection rests on a foundation of fact. Visual distance is not a mere matter of thought or projected action, but seems to be felt; and size, which varies with distance, is consequently also felt. On the other hand, there is an unmistakable heterogeneity between distance and the other two visual dimensions, length and breadth: distance does not appear spread out before us, as length and breadth are. The following hypothesis therefore suggests itself. It is well known that the chief factor in the visual perception of distance—with the blurring caused by binocular disparity—is convergence and accommodation of the eyes. The sense that distance is actually felt may then be due to the fact that it is brought before us by the muscular sensations of convergence and accommodation. Distance, in that case, would be felt but not visually felt. And the instance would constitute a beautiful example of the way external objects and relations are known by means of sensations which have in them little of the characters of the external things, but are simply used as signs.

These considerations contain the reply to the argument that the datum must be an existence because it is sensibly

vivid. The datum is sensibly vivid, because it is brought before us by a sensation and not by a mental image, but it is not properly a sensible fact. That is, we cannot actually find it as a feeling, as we can find an emotion or a pain ; we can only tend towards it or mean it. Here we come to the function of the intellect (in a wide sense) in connection with sense-perception, which is no less important than that of sense. In other words, a meaning here is not to be understood as a peculiar kind of feeling that can be met with introspectively in the same way that a visual sensation or a pain can, but as a *function* which the feeling discharges in bringing us into mental relation to an external thing. When, having a sensation caused by an object in our minds, we are disposed (in virtue of the connected nervous arrangements) to act as with reference not to it but to the object, then that object is, in so far, before the mind as a datum. And it is because the datum is a functional fact that *the same* object may be brought before the mind with sensible vividness, by means of a sensation, as something now present, or faintly, by means of a mental image, as merely imagined.

I trust I have now made out a case for the view that perceptual data must be distinguished from the sensations by the use of which they are given ; that, while the sensations are in time and perhaps space, the data are not so ; and that only the sensations are existences, while the data are logical entities or " essences."

IV

DATA OF MEMORY

Before drawing the consequences which follow from this view it may be worth our while to consider briefly the parallel distinction that exists in the case of memory between the datum, which here, too, will be found to be a mere essence, and the mental image by means of which the datum is given.

It has been proved, in one of the earlier of these essays,

against the pragmatists, that in memory the object known cannot be identified with the idea of it which the subject has before his mind when he remembers, since it has to be admitted to be an inaccessible past fact which can only be "meant," not directly experienced. What I shall now try to show is that this idea—if we mean by "idea" what is actually before the mind—must be recognized to be distinct from the mental image, visual, auditory, or other, by means of which we conceive it; that this mental image alone is a present fact, an existence; and that the idea is the mere character which we conceive the past fact to have, without its existence—in short, an essence. If the past fact *itself* cannot be given in memory, and if, on the other hand, it and nothing else must somehow be seized or before us in order that there should be memory at all, then what is before us must be its character without its existence: the datum must be a mere essence.

In the essay referred to Mr. Lovejoy argued that the datum in memory is not something merely present, but "present-as-absent." While there can be no objection to this simply as a vivid phrase or metaphor, I would point out that the word "present" has at least three meanings: (1) present to me in space—"here"; (2) present in time, and not past or future —"now"; (3) present to the mind, or "given." The relevant meaning in the present instance is "given," and it will be conducive to clearness of thought if we substitute this technical term for the more vague and metaphorical "present," and say that the past is "given-as-absent"—or "given-as-past." I will not here take up the question whether the pastness is a true part of the essence given, or comes in rather through our placing of the true essence, our referring it to a particular temporal position; I shall assume, for the purposes of this argument, that it is a part of the essence.

If, then, we try to analyse exactly what is given to us when we remember, I think we shall recognize, first, that at least there is no conscious contrasting of the past with the present—no conceiving of it as being not-now, but at most a conceiving

of it as *then*. In so far as we merely remember, we do not think of the present at all. Hence it will be better not to use the formula "given-as-absent," which seems to imply some awareness of the relation between the past and the present, but to speak of the datum in memory as "given-as-past." And of course we have no awareness (so far as we merely remember) that the past is *given*. So the true datum of memory is just simply "the past."

Now, how can it be maintained that this datum, this mere airy vision which must appear before the mind if we are to grasp the real past at all, *is* a present psychic state or existence? What is there in common (as to fundamental category) between something whose central essence is pastness, something *not* now real, and a visual or auditory image which is a present psychic existence? Such an image is, of course, necessary to determine what it is we remember—I must imagine the flash, if I am to remember striking a match a moment ago—but this present psychic state is the mere vehicle of the meaning "the past," it is not itself in any way an object of awareness when we remember. Similarly, we can conceive a class of things—"man"—but the image of a particular man, Socrates or other, or the sound of the word "man" heard internally, is not the datum at the moment; the datum is "man-in-general." In a word, we must distinguish, in memory and conception as much as in sense-perception, between the datum of the cognition, a mere essence, and the psychic state which is the vehicle of the datum.

When once this distinction is clearly made, it becomes evident that the datum, while not identifiable with the object in this sense, that we can argue that wherever a datum appears there must be a real object and that in contemplating the datum we are actually beholding the object as an existence, is yet and must be identical with the object in this other sense, that, if the knowledge is true, the essence given is the true essence of the object—so that in contemplating the datum we *virtually* behold the object. How could there be knowledge

at all unless we managed somehow virtually to behold absent things, to behold the past and the future, and, in the case of sense-perception, to behold objects existing separately from ourselves ?

This logical or essential identity is thus the keystone of a correct theory of knowledge ; and it is the substitute we must offer for the literal and absolute identity asserted by the neo-realists and the pragmatists.

V

APPLICATION OF THE CONCEPTION OF " ESSENCE " TO THE PROBLEM

In recent American discussion the view defended by the authors of this book has been opposed, as " epistemological dualism," to the " epistemological monism " represented especially by the neo-realists. This way of formulating the issue seems to me not in all respects happy. My colleagues have, indeed, guarded themselves carefully against being thought to advocate *ontological* dualism—a charge to which my way of speaking of physical things and psychic states in the preceding pages might seem to render me liable, though not with justice, since I hold that the two form a single world and that what appear to us as physical things are in themselves of psychic nature. The question I would raise is, however, whether even in epistemology the word " dualism " correctly expresses the relation between what is given and the real thing. For this is the relation which in epistemology we are especially concerned about.

The physical thing and the psychic state or sensation by means of which I perceive it are unquestionably two, and mutually independent—as much so as the physical thing and my organism or ego, of which the psychic state is a state. Nothing can obscure the fundamental fact that sense-perception is a means of adjusting the organism to its environment—of

making the ego aware of his friends and enemies—and that the ego and the environment are two, not one. It is quite another question whether the datum, the vision of the object that is given to the ego by means of his psychic state, is distinct from the object, in such wise that the object and the *essence* are two. If the essence is truly the essence of the object, as it should be in order that knowledge may be correct, the essence given and the essence embodied in the object are not two but one.

Here appears the immense advantage we have gained, in point of epistemological theory, by recognizing that the datum is a mere essence, a universal. If the datum were an existence —as it would necessarily be if its givenness were given in and with it, or if it were itself in time and space—it would necessarily be a second existence, independent of the object, and then, in being aware of it, we should not be aware of the object. It is precisely because it is a mere universal that the essence given and the essence embodied in the object may be the same, and that the mind in sense-perception may therefore be able to rest directly on the object. Hence it is only when we are wrong, and the essence given betrays or mis-presents the object, that there is epistemological dualism ; when we are right, epistemological monism—in this carefully limited sense—is the truth.

The view that the datum is an existence (psychical or other) inevitably leads to the fallacy of *representationism*, or (2) at the beginning. Representationism is the theory that the datum is the thing primarily known, and that it represents the physical thing, as a portrait represents a person. This is very near the truth, but it subtly perverts it, in a way entailing the most disastrous consequences. A picture is a distinct existence from a person ; if you see the picture, by hypothesis you do not see the person. It is another embodiment of the same essence. The consequence is that, in knowing the representative datum, you fail to know the object. This is the result of conceiving the datum as an existence, and therefore

as known. Whereas, on our view, knowledge requires two things: the givenness of an essence, and affirmation—that is, acting as if the essence were embodied in a real object—and mere givenness is not knowledge. The case is just like that of judgment, where a proposition must needs first be conceived before it can be affirmed.

Representationism has proved historically, and is naturally, the half-way house to subjectivism. Convince yourself, by reflecting on the characters which we attribute to physical things, how far data fail to correspond to them, and at the same time think of data as existences, as things primarily known, not as the mere given-essences of things known, and these data necessarily become barriers, screens, cutting us off from physical things instead of uniting us to them. The mere givenness of data becomes "experience." Independent things can at best only be inferred from data. But by what right do we employ inference to carry us beyond experience? Inference properly conducts us only from one experienced thing to another—we find by experience that A is succeeded by B, and when A comes we infer that B will follow; it cannot carry us beyond possible or eventual experience, and assure us of the existence of something that cannot be experienced at all. This train of thought has always, and must inevitably, conduct him who conceives "experience" as the givenness of existent data, and not as the perception of real things, from representationism onward to subjectivism.

Then follows the familiar sequence of psychological and logical subjectivism, psychological and logical objectivism. The experienced existence is at first very naturally conceived as psychological in its nature, as something whose *esse* is *percipi*, as involving givenness in its very being—as "experience." But, as philosophers reflect further upon experience, they see that in point of fact nothing psychological is given—that a chick who pecks at a grain of corn is not dealing (even from his own subjective point of view) with a sensation, that we do not think of mental images or of thoughts of things

but simply of things ; in a word, that the datum is *objective* in its category, that it is a pure essence without any flavouring of givenness or the psychical. Psychological subjectivism thus perforce changes into logical subjectivism ; or, in historical terms, the idealism of Berkeley, Hume, and Mill gives place to the idealism of the post-Kantians.

Finally, in our own day, the influence of science makes itself felt in philosophy, and a system which, in defiance of Copernicus, would make the world revolve about the individual ego or an Absolute Ego difficult to distinguish from it becomes less and less credible. Idealism, it is seen, must go ; but the assumption which was its fundamental premise—the identity of the given-essence with the physical thing—is still allowed to remain. The primal fallacy of the Cartesian " ideal theory," in other words, has not yet been exorcised. Upon this basis we get, first, psychological objectivism, the doctrine that " the perception is in the object," that the fundamental data are " experienced - things " (which, by a strange contradiction, continue to exist as " experienced-things " when they are not experienced) ; and, second, logical objectivism or neo-realism (the neo-realism of our six innovators), with its assertion that the fundamental data are " neutral things " which are yet at the same time continuously existent physical things, a chaos of mingled hits and misses which is yet at the same time the system of reality.

The *crux* of this last philosophy is the problem of error ; how can things be unreal which are nevertheless real, and the only reals ? The problem is an insoluble one ; it can seem to be solved, only by now representing all error as intellective, as matter of interpretation, none as perceptual, and now throwing overboard the principle of contradiction. The predicament in which the logical objectivist finds himself can be escaped only by recognizing that data as such are not existences or reals, and that the existence of real things is not given but only affirmed.

To sum up, error of perception (*i.e.* colour - blindness,

hallucination, dreaming, the existence of secondary qualities) is possible only because the givenness of the essence is independent of its embodiment, in such wise that an essence may be given different to a greater or less extent from that which is embodied. This possibility is secured by the psychological mechanism of sense-perception, which uses states of the ego as symbols to bring before us objects, *i.e.* to make essences given. Truth of perception is possible only because the essences given are not existences, but universals, the bare natures (if they *are* the natures) of the objects, in such wise that the essence embodied and the essence given may be the same. This combination of psychological duality with logical unity is therefore the very essence of the epistemological situation. Only by recognizing that data are as we have described them can the pitfalls and snares of the question be avoided, and a solution be reached which places knowing on a healthy common-sense basis. If, and only if, the datum is a mere logical vision of the real thing can it truly be a vision of it.

THE END

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